AHIMA
Distance Education

Coding for Diabetes

Audio Seminar / Webinar

April 10, 2008

Practical Tools for Seminar Learning

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The faculty has reported no vested interests or disclosures regarding this presentation.

Faculty

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Susan Mitchell, MS, RN, CDE, CNS, is a clinical nurse specialist and certified diabetes educator at the ediba Diabetes Center for Excellence (DCE) in Oklahoma City, OK. Ms. Mitchell serves as a consultant to DEC-affiliated hospitals throughout Oklahoma, assisting them in establishing inpatient glycemia management programs and outpatient diabetes education programs. She is also the program coordinator of the Diabetes Education Program at DCE, which as achieved recognition from the American Diabetes Association for meeting national standards for quality diabetes education.

Table of Contents

Objectives

- **Overview of diabetes**
- **Discuss clinical knowledge of diabetes and it's complications affecting other body systems.**
- **Review ICD-9-CM diagnostic coding guidelines and case scenarios**

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Polling Question #1

What type of facility do you represent?

- ***1 Hospital**
- ***2 Large Clinic**
- ***3 Physician office**
- ***4 Other setting**

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Diabetes - an increasing concern

- **20.8 million with Diabetes in U.S.**
  (7% of population)
- **14.6 million diagnosed**
- **6.2 million undiagnosed**
- **41 million with prediabetes**

ADA 2005 statistics

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Every Day:

- **41,000 new diagnosis of diabetes**
- **810 die from its complications**
- **230 amputations**
- **120 go on dialysis**
- **55 go blind**

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What is Diabetes?

Metabolic Disorder

⇩

Hyperglycemia

⇩

Absolute Deficiency of Insulin
or
Relative Decrease in Secretion & Effectiveness of Insulin

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Interplay of Hormones

Insulin- produced continuously by beta cells in pancreas. Promotes entry of glucose into cells.

Amylin- produced by beta cells in pancreas, co- secreted with insulin. Enhances insulin action, slows gastric emptying, inhibits glucagon.

Incretin hormones- secreted from gut, GLP-1 and DPP-4 inhibitors. Promote action of insulin, slows gastric emptying, inhibits glucagon.

Glucagon- produced by alpha cells of pancreas. One of the counter regulatory hormones which works the opposite of insulin. Decreases insulin action, increases glucose production by liver.

Other counter regulatory hormones: cortisol, growth hormone, epinephrine

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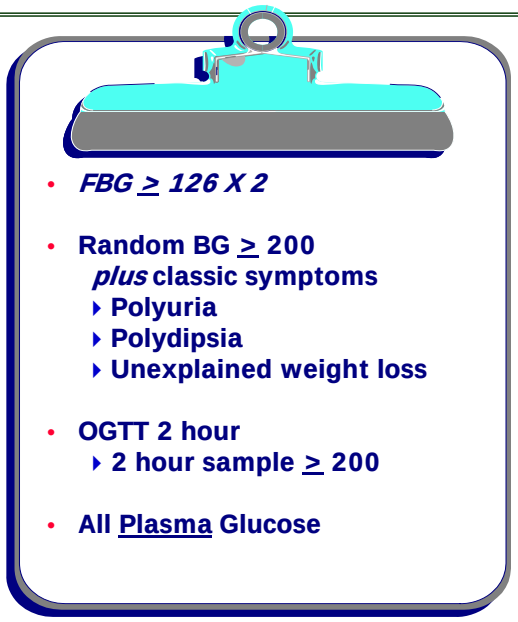
Diagnosing Diabetes



- ***FBG ≥ 126 X 2***
- **Random BG ≥ 200**
  ***plus* classic symptoms**
  - **Polyuria**
  - **Polydipsia**
  - **Unexplained weight loss**
- **OGTT 2 hour**
  - **2 hour sample ≥ 200**
- **All Plasma Glucose**

Normal Blood Glucose (BG)
< 100 mg/ dL

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Signs and Symptoms of Diabetes

- **Polyuria**
- **Polydypsia**
- **Polyphagia**
- **Weight loss**
- **Nausea, vomiting**
- **Blurred vision**
- **Fatigue**
- **Frequent infections**
- **Slow healing**
- **Tingling hands and feet**

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Polling Question #2

How do the majority of your physicians currently document diabetes mellitus?

***1 IDDM or NIDDM**
***2 Type 1 and Type 2 Diabetes**
***3 Adult Onset NIDDM or Juvenile IDDM**
***4 Type I and Type II Diabetes**
***5 All of the above**

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Types of Diabetes

- **Type 1 ∅ type I, IDDM**
- **Type 2 ∅ type II, NIDDM**
- **Gestational Diabetes**
- **Other**

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Type 1

Genetic predisposition
Environmental factors
Autoimmune process

Destruction of Beta Cells

Insulin Deficiency

Type 1 "Profile"

10% of diabetes

younger < 30 yr. old

INSULIN DEFICIENCY

prone to ketoacidosis

sudden onset of symptoms and illness

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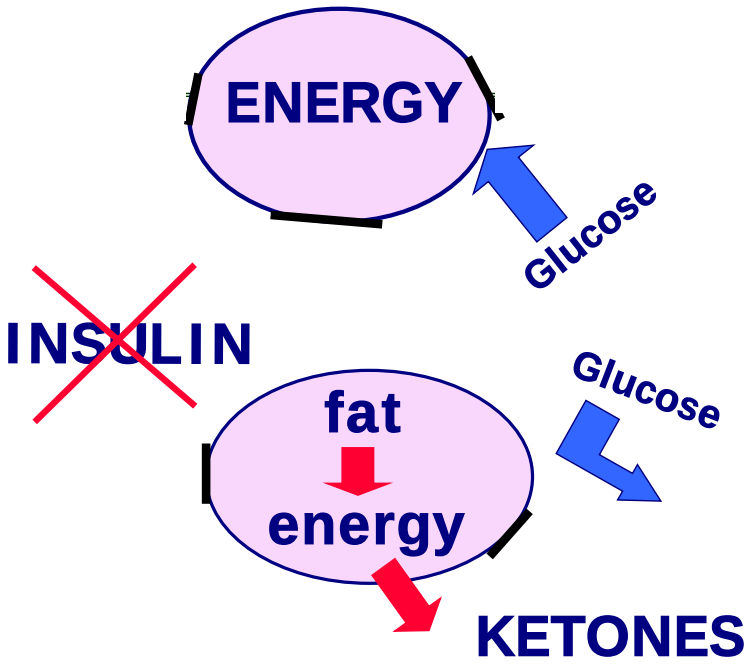

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Treatment for Type 1

- ***Insulin***
- **Pramlintide (Symlin®)**
- **Exercise & Nutrition**
- **Complication Prevention**

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Type 2

Genetic Predisposition
Acquired Factors

Insulin Resistance
(decreased cell sensitivity)

Decreased Insulin Secretion

Increased liver glucose production

Type 2 "Profile"

- **90% of diabetes**
- **usually older than 30 years old**
- ***INSULIN RESISTANCE***
- **not prone to ketoacidosis**
- **gradual onset of symptoms or none**
- **80% overweight ; 20% lean**

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Treatment for Type 2

- ***Exercise & Nutrition***
- ***Medications***
- **Complication prevention**

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Coding Diabetes Guidelines

The below listed diabetes guidelines are not inclusive. The coder should refer to the applicable *Coding Clinic* guidelines for additional information and also *ICD-9-CM Official Guidelines for Coding and Reporting Effective October 1, 2007*

Fifth-digits for category 250:

The following are the fifth-digits for the codes under category 250:

0 type II or unspecified type, not stated as uncontrolled

1 type I, [juvenile type], not stated as uncontrolled

2 type II or unspecified type, uncontrolled

3 type I, [juvenile type], uncontrolled

The age of a patient is not the sole determining factor, though most type I diabetics develop the condition before reaching puberty. For this reason type I diabetes mellitus is also referred to as juvenile diabetes.

Type of diabetes mellitus not documented

If the type of diabetes mellitus is not documented in the medical record the default is type II.

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Coding Diabetes Guidelines

- If the documentation in a medical record does not indicate the type of diabetes but does indicate that the patient uses insulin, the appropriate fifth-digit for type II must be used.
- For type II patients who routinely use insulin, code V58.67, Long-term (current) use of insulin, should also be assigned to indicate that the patient uses insulin. Code V58.67 should not be assigned if insulin is given temporarily to bring a type II patient's blood sugar under control during an encounter.

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Gestational Diabetes

- **Glucose intolerance during pregnancy**
- **Women at risk are screened at 24-28 weeks gestation**
- **Management – diet/exercise – glyburide, metformin, insulin**
- **Resolves after the delivery**
- **At high risk for developing type 2 diabetes later in life.**

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Diagnosis Gestational Diabetes

Fasting	**95 mg/dL**
1 hour	**180 mg/dL**
2 hour	**155 mg/dL**
3 hour	**140 mg/dL**

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Goals for Pregnancy and Diabetes

***Fasting* plasma glucose**
65 – 100 mg/dL

***Postprandial* plasma glucose**

1 hour: 110 – 135 mg/dL

2 hour: <120 mg/dL

2 a.m.-6:00 a.m. 65-135 mg/dL

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Pre-diabetes

- **Impaired Fasting Glucose (IFG)**

  FPG 100-125 mg/dL

- Impaired Glucose Tolerance (IGT)

  2 hr PG 140-199 mg/dL

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Diabetes Mellitus in Pregnancy and Gestational Diabetes

Diabetes mellitus in pregnancy

Diabetes mellitus is a significant complicating factor in pregnancy. Pregnant women who are diabetic should be assigned code 648.0x, Diabetes mellitus complicating pregnancy, and a secondary code from category 250, Diabetes mellitus, to identify the type of diabetes.

Gestational diabetes

Gestational diabetes can occur during the 2nd and 3rd trimester of pregnancy in women who were not diabetic prior to pregnancy. Gestational diabetes can cause complications in pregnancy similar to those of pre-existing diabetes mellitus after pregnancy It also puts the woman at risk for developing diabetes after pregnancy. Gestational diabetes is coded to 648.8x Abnormal glucose tolerance. Codes 648.0x and 648.8x should never be used together on the same record. Code V58.67. Long term (current) use of insulin, should also be assigned if the gestational diabetes is being treated with insulin.

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Coding for Diabetes

Emergency room visit:

A 28 year old diabetic at 36 weeks gestation presents to the ED this evening with concerns that the fetus has not moved at all today. The patient was instructed at her last clinic visit to count fetal movement during a 30 minute period daily and seek prompt attention if she noticed a sudden decrease in fetal movement. This is the patients first pregnancy and control of her type I diabetes has been fairly adequate throughout the pregnancy. Blood glucose level in the ED is 120. A limited ultrasound examination demonstrates fetal movements with normal heartbeat recorded. The patient is discharged home with instructions to rest on her left side through the night and report to the obstetrical clinic tomorrow morning.

Code assignment:

655.73 Decreased fetal movements

648.03 Diabetes mellitus complicating pregnancy

250.01 Diabetes mellitus, type 1

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Metabolic Syndrome

diagnosis when 3 or more risk factors are present

- **Elevated blood pressure > 130/85**
- **Central (abdominal) adiposity**

  men > 40 in. women > 35 in.
- **Low HDL-C men < 40 mg/dL women < 50 mg/dL**
- **Elevated triglycerides > 150 mg/dL**
- **Elevated fasting blood glucose > 100 mg/dL**

  indicative of insulin resistance

NCEP Adult Treatment Panel III

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Glycemic Control Guidelines

	ADA	ACE / AACE
Pre-prandial BG	90-130	< 110
Post-prandial 2 hr	< 180	< 140
A1C	< 7	< 6.5

American Diabetes Assoc. 2003, American College Clinical Endocrinology 2002

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Hemoglobin A1C

- **"average" blood glucose over 3- 4 months**
- **measures amount of glucose that attaches to protein in the red blood cells- glycosylation**

- **Normal A1C- 4-6%**
- **Higher the glucose in the blood the higher the A1C results**
  - **For example, a BG of 310 is ~ A1C of 11%**
    240 is ~ A1C of 9%
    170 is ~ A1C of 7%
    135 is ~ A1C 0f 6%

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Lipid Goals

Cholesterol (mg/dL)	**<200**
LDL-C (mg/dL)	**<100**
HDL-C (mg/dL)	**> 40**
TG (mg/dL)	**<150**
Blood Pressure Goal	**< 130/ 80**

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Long Term Complications

- **Microvascular Disease - retinopathy, nephropathy, neuropathy (peripheral, autonomic, cranial)**
- **Macrovascular Disease - cardiovascular, cerebrovascular, peripheral vascular**
- **Dermatological**
- **Musculoskeletal**
- **Delayed growth and development**
- **Periodontal disease**
- **Unusual infections**

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Diabetes Associated with

- **Depression**
- **Eating disorders**
- **Thyroid disease**
- **Cystic Fibrosis**
- **Rheumatoid arthritis**
- **Alzheimer's disease**
- **Polycystic ovary syndrome**
- **Osteoporosis**
- **Sleep apnea**
- **Breast Cancer**
- **Celiac Disease**

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Complications of Diabetes

2-4x

25x

17x

2-6x

5x

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Macrovascular Disease

- **Diabetes is**
  - **Prothrombic**
  - **Proinflammatory**
- **Atherosclerosis occurs at earlier age and advances more rapidly**
- **Manifested as**
  - **Cardiovascular disease**
  - **Cerebrovascular disease**
  - **Peripheral vascular disease**

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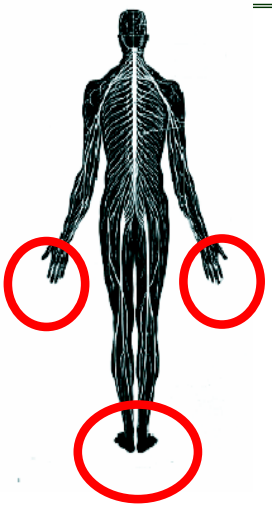
Peripheral Neuropathy



Damage is distal and symmetrical affecting the feet, hands, legs

Insidious onset, progressive

Signs/ symptoms:

painful - shooting, stabbing, gnawing, burning, extreme hypersensitivity, severe aching, worse at night

non painful- numbness, tingling, dead feet, stocking glove effect

Loss of protective is #1 cause of ulcers and amputations.

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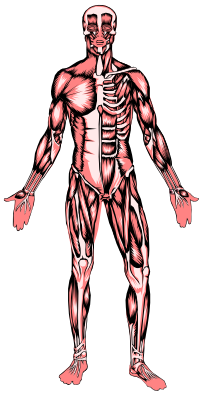
Autonomic Neuropathy

Cardiovascular Autonomic Neuropathy
Postural hypotension, Cardiac denervation, Fixed heart rate

Gastrointestinal
Gastroparesis (gastropathy)- delayed stomach emptying
Diabetic diarrhea, constipation

Genitourinary
Neurogenic bladder
Sexual dysfunction

Impaired insulin counterregulation
Hypoglycemic unawareness
Sudomotor dysfunction (sweating)
Pupillary response



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Coding for Diabetes and Arteriosclerosis

Condition	ICD-9-CM Codes
Diabetic peripheral vascular disease causing intermittent claudication	250.7x, 443.81
Diabetic atherosclerosis with gangrene	250.7x, 440.24 (Code for gangrene is included in 440.24) Note: New 2008 code 440.4 should be used in addition to code 440.24 if total occlusion of arteries of the extremities is present.

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Coding Diabetes

- Diabetes-Associated Neurological Complications - 250.6
  - Polyneuropathy (many nerves) – 357.2
  - Autonomic neuropathy – 337.1
  - Gastro paresis (delay in gastric emptying) – 536.3
  - Mononeuropathy (one nerve) – 354.0-355.9
  - Neurogenic arthropathy (joint destruction) – 713.5
  - Amyotrophic (muscle wasting) – 358.1 changed to 353.1 (2008)

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Nephropathy

Small blood vessels in the nephrons of the kidneys are damaged- nephrons are the filtering units of the blood

Hypertension markedly accelerates progression of diabetic nephropathy

*There are **NO** early warning symptoms*

Microalbumin in the urine is the earliest clinical evidence of kidney damage- *screen annually*

normal- < 30 microgm/mg **positive- between 30- 300**

clinical albuminuria (protein) > 300

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Prevent/Delay Nephropathy

- Blood Glucose control
- **Blood Pressure control**
  < 130/80 mm Hg
- ACE inhibitors/ARBs -
  anti hypertensive drugs
- Normalize protein in diet

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Coding Diabetic Nephropathy

- **If the diagnosis does not state a cause and effect relationship between diabetes mellitus and chronic renal failure or chronic uremia the code for chronic renal failure (585.9) may be assigned as the principal or first listed code.**
  Example:
  585.9, Chronic renal failure
  250.0X, Diabetes Mellitus without mention of complication
- **If the diagnosis provides a cause and effect relationship, such as diabetic chronic renal failure, code 250.4X, Diabetes with renal manifestations, is required to be sequenced first.**
  Example: Chronic renal failure due to Type 1 diabetic nephropathy is coded 250.41, 583.81 and 585.9

Reference: AHA CC 2005 4Q, 2003 1Q, 1991 3Q, 1984-Sept-Oct

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Coding Diabetic Nephropathy

- **Chronic renal failure due to diabetic nephropathy in a patient with hypertension is coded:**

  250.40, Diabetes with renal manifestations type II or unspecified type not stated as uncontrolled

  403.90, Hypertensive chronic kidney disease with chronic kidney disease, unspecified

  585.9, Chronic kidney disease, unspecified

  Reference: AHA CC 2006 4Q, 2005 4Q, 2003 1Q

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Coding for Diabetes

DM Renal / Kidney Complications - 250.4
Chronic Kidney Disease – 585.X

- **Stage I 585.1**
- **Stage II (mild) 585.2**
- **Stage III (moderate) 585.3**
- **Stage IV (severe) 585.4**
- **Stage V (chronic) 585.5**
- **ESRD 585.6**
- **Chronic kidney disease (CKD) 585.9 or CKD unspecified (chronic renal failure insufficiency)**

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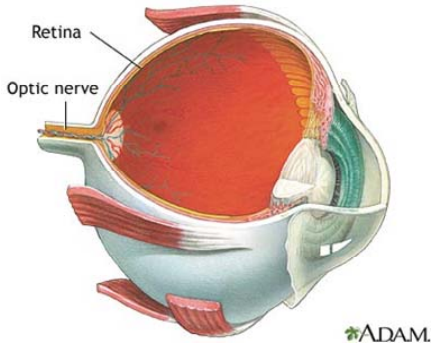
Retina



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Retinopathy

- Small blood vessels in the retina are damaged- retina is the thin, fragile lining in the back of the eye
- Most frequent cause of new blindness
- There are **NO** early warning symptoms
- Screening exam for early detection- annual dilated eye exam

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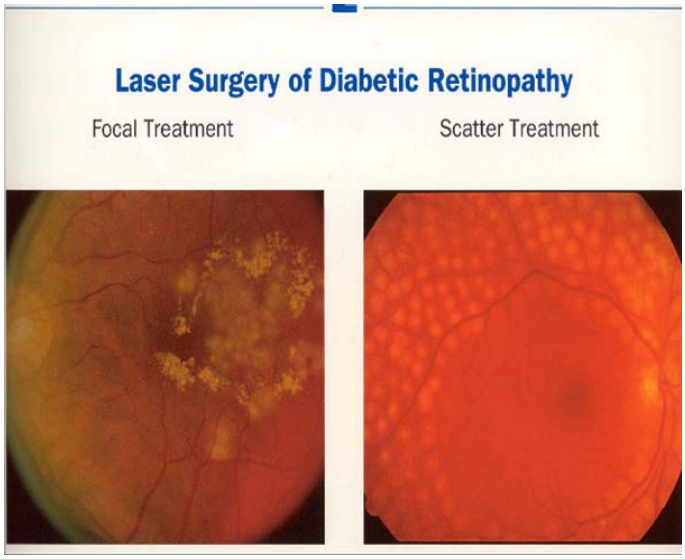
Laser Surgery Diabetic Retinopathy



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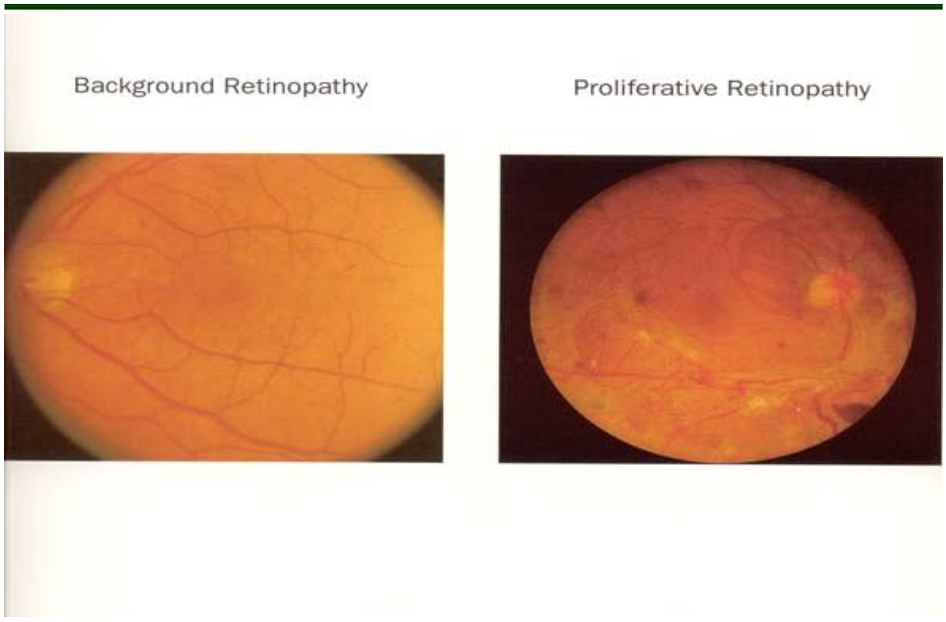
Diabetic Retinopathy



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Coding for Diabetes

Diabetes-Associated Complications
Ophthalmic Manifestations – 250.5

- Cataract 366.41
- Glaucoma 365.44
- Macular edema 362.07
- Retinal edema 362.07 plus retinopathy
- Diabetic Retinopathy 362.01 - 362.07

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Coding for Diabetes

Diabetes-Associated Eye Complications - 250.5

- Background diabetic retinopathy - 362.01
- Proliferate diabetic retinopathy - 362.02
- Nonproliferative diabetic retinopathy - 362.03
- Mild nonproliferative diabetic retinopathy - 362.04
- Moderate nonproliferative diabetic retinopathy - 362.05
- Severe nonproliferative diabetic retinopathy - 362.06
- Diabetic macular edema - 362.07 *

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Coding Diabetes Guidelines

Diabetic retinopathy/diabetic macular edema

- **Diabetic macular edema, code 362.07, is only present with diabetic retinopathy. Another code from subcategory 362.0, Diabetic retinopathy, must be used with code 362.07. Codes under subcategory 362.0 are diabetes manifestation codes, so they must be used following the appropriate diabetes code.**
- **Diabetic macular edema, code 362.07, is only present with diabetic retinopathy. Another code from subcategory 362.0, Diabetic retinopathy, must be used with code 362.07. Codes under subcategory 362.0 are diabetes manifestation codes, so they must be used following the appropriate diabetes code.**

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Type 2 Pharmacological Therapy

Secretagogues

Sulfonylureas- **glimepiride (Amaryl)**
glyburide (Diabeta, Micronase, Glynase)
glipizide (Glucotrol)

Meglitinides- **repaglinide (Prandin)**
nateglinide (Starlix)

Insulin Sensitizers

Biguanides- **metformin (Glucophage)**

Thiazolidinediones- **pioglitizone (Actos)**
rosiglitizone (Advandia)

Delayed Glucose Absorption

Alpha glucosidase Inhibitors- **acarbose (Precose)**
meglitol (Glyset)

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Type 2 Pharmacological Therapy

Combination oral agents-

Glucovance
Metaglip
Actoplus met
Avandamet
Avandaryl
duetact

DPP-4 Inhibitor

sitagliptin (**Januvia**)

Incretin mimetic- injection

exenatide **(Byetta)**

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Type 1 & 2 Pharmacological Therapy

Fast and rapid acting insulin- bolus insulin

regular (**Humulin R, Novolin R**)
lispro (**Humalog**)
aspart (**NovoLog**)
glulisine (**Apidra**)

Intermediate and long acting insulin- basal insulin

NPH (**Humulin N, Novolin N**)
glargine (**Lantus**)
detemir (**Levemir)**

combinations:

Humulin 70/30 and 50/50, Novolin 70/30
Humalog mix 75/25
NovoLog mix 70/30

amylin analog

pramlintide (**Symlin**)

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History of Pumps

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Coding Diabetes Guidelines

Overdose of insulin due to insulin pump failure

- **The principal or first listed code for an encounter due to an insulin pump malfunction resulting in an overdose of insulin, should also be 996.57, Mechanical complication due to insulin pump, followed by code 962.3, Poisoning by insulins and anti-diabetic agents, and the appropriate diabetes mellitus code based on documentation.**

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Coding Diabetes Guidelines

Insulin pump malfunction

(a) Under dose of insulin due to insulin pump failure

An under dose of insulin due to an insulin pump failure should be assigned 996.57, Mechanical complication due to insulin pump, as the principal or first listed code, followed by the appropriate diabetes mellitus code based on documentation.

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Coding for Diabetes

A type I diabetic patient is treated due to diabetic ketoacidosis. The patient's insulin pump malfunctioned during the night and stopped delivering insulin.

Answer and Code Assignment:

996.57, Mechanical complication of other specified prosthetic device, implant, and graft, due to insulin pump

Assign code 250.13, Diabetes with ketoacidosis, type 1 uncontrolled

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Inpatient Concerns

Uncontrolled Diabetes or Hyperglycemia *same liability*

Hyperglycemia in the Hospital

Diabetes- **previously diagnosed**
unrecognized- undiagnosed

Stress hyperglycemia

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The Hospitalized Patient

Hospitalizations

Costs

LOS

Mortality

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Length of Stay Comparison

Patients with no diabetes/indicators ***(63% of total admits)***	**ALOS = 5.0 days**
Patients with "250" dx code ***(25% of total admits)***	**ALOS = 6.9 days**
Patients with no "250" dx code on diabetes meds & BG > 180 ***(12% total admits)***	**ALOS = 9.6 days**

Approx. 40% of total admits have diabetes and/or indicators

Olson, 2000, INTEGRIS Baptist, OK

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Polling Question #3

With approx. 40% of total admits having diabetes and/or indicators, which of the following documented signs and symptoms in a medical record may indicate a patient has diabetes?

- ***1 Extended length of Stay**
- ***2 Diabetic Medication IV, Subcut, Oral**
- ***3 Signs and symptoms of diabetes**
- ***4 Blood Glucose < 100 mg/dL**
- ***5 Lab or FSBS values above 180**
- ***6 All of the above**

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Physician Query Process

- **Reported codes must be supported by physician documentation.**
- **Abnormal findings are not coded and reported unless the physician indicates their clinical significance**

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Deaths Among Hospitalized Patients

12 / 1000	**No diabetes diagnosis**
27 / 1000	**Diabetes diagnosis known**
40 / 1000	**Unrecognized diabetes**

Whitehall 1988

New hyperglycemia	**16 %**
Known diabetes	**3 %**
Normoglycemia	**1.7 %**

Umpierrez 2002

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Documentation and Coding

One major hospital chart review:

7% – Diabetes diagnosis mentioned

27% – Hyperglycemia mentioned

66% – No mention of diabetes or hyperglycemia

Olson, INTEGRIS, 2000

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BG Control for Hospitalized Patients

Intensive Care	**< 110 mg/dL**
Non- critical Care Units	**< 110 preprandial** **< 180 maximum**
Pre-labor and Labor & Delivery	**< 100 preprandial** **< 120 one hour PP**

ACE Consensus Conference Position Statement 2003

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BG Control in Hospital affected by:

- Increased insulin resistance
- Corticosteroids (ie. Prednisone, Solu Medrol, etc.)
- Infection
- TPN (Total Parenteral Nutrition) and Tube Feedings
- Changing IV glucose rates
- Decreased physical activity
- Unusual timing of insulin injections/ meals
- Under use of protocols, overuse of sliding scale insulin

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Better Outcomes

- Mortality
- Infections
- Sepsis
- DSWI
- Blood transfusions
- Renal replacement therapy
- Ventilator use
- Critical illness neuropathy
- Antibiotics
- LOS
- ICU stay

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Acute Complications

Diabetic Ketoacidosis (DKA)

associated with type 1

Hyperosmolar Hyperglycemic State (HHS)

associated with type 2

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Diabetic Ketoacidosis (DKA)

Ketosis

Metabolic acidosis

Hyperglycemia

Dehydration

DKA Signs & Symptoms

3 "Polys"- polyuria, polydypsia, polyphagia

plus

Nausea, vomiting, abdominal pain, "acute abdomen"
Kussmaul respirations
Acetone breath
↑ drowsiness leading to coma
Signs of dehydration

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DKA Clinical Findings

Ketones positive

BG >250

Acidosis

- pH <7.2
- bicarb <15
- pCO_2 <15-20
- anion gap >12

Serum osmolality variable

Serum K^+ low, normal, high

Na^+ normal, low, high

Fluid deficit approx. 3-7 liters

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DKA Goals of Therapy

1st Correct acidosis
2nd Normalize blood glucose
3rd Correct fluid deficit
4th Balance electrolytes
5th Prevent reoccurrence

DKA Management

Insulin
Fluids
Potassium
Bicarbonate

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Diabetic Coding

Diabetic ketoacidosis

Diabetic ketoacidosis (DKA) is coded to 250.13 with ketoacidosis type I (juvenile type), uncontrolled. It is uncontrolled by definition

Code 250.13 is the default, unless the physician specifically documents type II. Prior to 7/15/06 DKA was coded to 250.11 unless specifically identified as NIDD 250.10.

Reference: AHA CC, 2Q, 2006 pgs 19-20; CC, 3Q, 1991, pgs 6-7

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Diabetic Coding

Hyperosmolarity/diabetes

Diabetes with Hyperosmolarity (increase in the concentration of the blood) is coded 250.2x.

Reference: AHA CC, 4Q, 1993, pg 19; CC, 3Q, 1991, pg 7

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HHS Key Characteristics

Severe hyperglycemia
Marked dehydration
Neurological changes
Absent or slight ketones

HHS Signs & Symptoms

Decreased mentation or confusion
Lethargy
Focal neuro signs- looks like stroke
Stupor, coma

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HHS Clinical Findings

- **BG > 600 mg/dL**
- **Ketone bodies absent or small**
- **Serum osmolality > 320 mOsm/L**
- **Fluid deficit 6-12 liters**
- **Serum K+ low, normal, high**
- **Na+ low, normal, high**

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HHS Goals of Therapy

- 1st Correct fluid deficit
- 2nd Balance electrolytes
- 3rd Normalize blood glucose
- 4th Prevent reoccurrence

HHS Management

- Insulin
- Fluids
- Potassium

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Coding for Diabetes

Acute Complications of Diabetes

Hypoglycemia = BG less than 70 mg/dL

Hypoglycemia in a Diabetic Patient:

- **Diabetic Hypoglycemic Coma - 250.3**
- **Diabetic Hypoglycemia – 250.8**
  "hypoglycemic shock" – 250.8

Hypoglycemia in a NON-Diabetic:

- **Hypoglycemia Coma – 251.0**
- **Hypoglycemia, unspecified – 251.2**

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Resources

- **American Diabetes Association Clinical Practice Recommendations: Diabetes Care, Supplement 1, Jan 2008. www.diabetes.org/diabetescare**
- **The Art and Science of Diabetes Self-Management Education: A Desk Reference for Healthcare Professionals. 2006, American Association of Diabetes Educators, Chicago, Illinois.**
- **Diabetes Today: An Update for Healthcare Professionals manual. 2006, ediba Diabetes Center of Excellence, Oklahoma City, OK.**
- **ACE position statement PDF link**
  http://www.aace.com/meeting/consensus/icc/ACEPosiSTAT.pdf

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Resource/Reference List

- **Diabetes Statistics**
  http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf

- **TMF Health Quality Institute**, the Medicare Quality Improvement Organization for Texas
  www.hpmp.tmfhqi.net

- ***Archives of Internal Medicine***, January 28, 2008, "Step by Step Medical Coding," 2008 by Carol Buck

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Coding References

- **ICD-9-CM Official Guidelines for Coding and Reporting:**
  http://www.cdc.gov/nchs/datawh/ftpserv/ftpicd9/ftpicd9.htm#guidelines
- ***AHA Coding Clinic® for ICD-9-CM*,**
- **AHIMA Practice Brief: Developing a Physician Query Process**
  http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_009224.hcsp?dDocName=bok1_009224

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Faculty: **Gloryanne Bryant, RHIA, RHIT, CCS and Ella James, MS, RHIT, CPHQ**

April 24, 2008

Reporting Hospital Outpatient Modifiers

Faculty: **Caroline Rader, MBA, MSHCA, CHC, and Shelley C. Safian, MAOM/HSM, CCS-P, CPC-H, CHA**

April 17, 2008

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