Occupational Therapy and Diabetes: Understanding our Role in Chronic Care Management

Occupational Therapy Association of California Annual Conference
October 14, 2011

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Learning Objectives

• Describe the clinical presentation, management, and complications of diabetes.

• Articulate OT’s unique contribution in improving patients’ diabetes self-management and diabetes-related health and quality of life.

• Understand billing and reimbursement mechanisms supporting OT services for patients with diabetes.

• Identify implications of healthcare reform and the changing healthcare climate on OT’s role in primary care and chronic condition management.
Who are you?

- What setting do you working in?
  - Pediatric
  - Inpatient acute
  - Inpatient rehab
  - Outpatient
  - Home health
  - Other?

- How often do you see patients with diabetes?
  - As comorbidity
  - Primary reason for OT referral

- How would you describe your comfort level addressing diabetes with your patients?
Today’s Session

• Part I: What is diabetes? How does it impact occupation?

• Part II: Case Studies: Intervention approaches for diabetes

• Part III: Reimbursement, advocacy, and healthcare reform
Part I: What is diabetes?

• Clinical presentation and treatment
  o Types of diabetes
  o Natural course and progression (including complications)
  o Medical/pharmacological therapies
  o Lifestyle treatment approaches
Fast Facts on Diabetes

- 25.8 million people in the U.S. have diabetes
- Among U.S. adults, diabetes is the leading cause of:
  - Kidney failure
  - Nontraumatic LE amputations
  - New cases of blindness
- Diabetes is the 7th leading cause of death
  - NOT including deaths due to heart disease and stroke
- Compared to non-Hispanic whites, diabetes risk is:
  - 77% higher for non-Hispanic blacks
  - 66% higher for Hispanics
  - 18% higher for Asian Americans
Fast Facts on Diabetes

- OT practitioners address physical, cognitive, psychosocial, and sensory aspects of everyday life activities, *including the integration of diabetes self-care* into clients’ existing habits and routines.

- Need for services: there are 25.8 million people with diabetes in the U.S. and only
  - 4,000 endocrinologists (one for every 6450 patients)
  - 15,000 certified diabetes educators (one per 1720 patients)

- Occupational therapy is one of 13 disciplines eligible to become certified as diabetes educators (CDE)
<table>
<thead>
<tr>
<th>Key players in diabetes:</th>
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<tbody>
<tr>
<td><strong>Glucose</strong>: The body’s main source of energy (made in the liver and comes from the foods we eat)</td>
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<tr>
<td><strong>Insulin</strong>: Hormone made by the pancreas that transports glucose from the blood into the body’s cells to be used for energy</td>
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<tr>
<td><strong>Pancreas</strong>: Organ responsible for insulin production</td>
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<tr>
<td><strong>Beta cells</strong>: located on the pancreas, responsible for insulin production</td>
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</table>
What is diabetes?

- Disorder of glucose metabolism

- Chronic disease with progressive course

- Related to insulin deficiency and/or insulin resistance:
  - **Insulin deficiency**: insulin is no longer produced by the pancreas
  - **Insulin resistance**: insulin is produced but no longer able to perform its function of putting glucose into the cells
What is diabetes?

**INSULIN DEFICIENCY**

**INSULIN RESISTANCE**
Classification of diabetes

- Type 1 (T1DM): **Absolute** insulin deficiency
- Type 2 (T2DM): **Relative** insulin deficiency insufficient to overcome insulin resistance
  - Step 1: Insulin resistance
  - Step 2: Extra production of insulin
  - Step 3: Beta cells burn out
  - Step 4: Deficiency of insulin

- **Gestational Diabetes (GDM):** Relative deficiency of insulin during pregnancy, when insulin resistance is higher
- **Other forms** (including MODY; drug/chemical-induced; infection-induced; genetic defects or syndromes)
What’s the difference?

TYPE 1 DIABETES (T1DM)

- **Etiology**: autoimmune (most common), idiopathic
- **Prevalence**: 0.4% (and rising)
- **Onset**: Rapid, acute
- **Treatment**: Insulin therapy
  - Fixed regimen
  - Flexible regimen (multiple daily injections)
  - Insulin pump

TYPE 2 DIABETES (T2DM)

- **Etiology**: genetic, behavioral, environmental risk factors
- **Prevalence**: 8.6% (and rising)
- **Onset**: Gradual, “silent”
- **Treatment**: Combination of:
  - Lifestyle change (weight loss, physical activity)
  - Oral medication
  - Insulin therapy (see T1DM)

Testing for Diabetes

- **Fasting plasma glucose (FPG)**
  - Amount of glucose in the blood after 12-hour (overnight) fast
  - Abnormal = Impaired fasting glucose (IFG)
- **Oral glucose tolerance test (OGTT)**
  - Amount of glucose in the blood after consuming high-glucose beverage
- **A1C % (hemoglobin A1C/HbA1c)**
  - Average blood glucose levels over ~3 months
Prediabetes

- Increased risk of diabetes
- Any of the following:
  - Impaired fasting glucose (IFG)
  - Impaired glucose tolerance (IGT)
  - Elevated hemoglobin A1C

Metabolic Syndrome

- Increased risk of diabetes
- Increased risk of cardiovascular disease
- At least 3 of the following:
  - Impaired fasting glucose (IFG)
  - Triglycerides $\geq 150$ mg/dL
  - Blood pressure $\geq 130/85$
  - Abdominal obesity
    - Waist circ. $>40”$ in men, $>35”$ in women
  - Low HDL cholesterol
    - $<40$ mg/dL in men, $<50$ mg/dL in women
Progression of Type 2 Diabetes

http://www.diabetes.org/diabetes-basics/prevention/pre-diabetes/how-to-tell-if-you-have.html
Progression of Type 2 Diabetes

**Diagnosis:** Cutoff based on risk of long-term complications

ABCs: Cornerstones of Diabetes Care

A: A1C (average blood glucose)
   • Every percentage point drop in A1C can reduce the risk of microvascular complications by 40%

B: Blood pressure
   • Every 10 mm/Hg reduction in systolic blood pressure can reduce the risk for any diabetes complication by 12%

C: Cholesterol
   • Improved control of LDL cholesterol can reduce cardiovascular disease risk by 20% to 50%

**Know your numbers: Treatment targets**

<table>
<thead>
<tr>
<th><strong>A1C</strong></th>
<th><strong>Blood Pressure</strong></th>
<th><strong>Cholesterol</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Target for healthy adults: &lt;7%</td>
<td>• &lt;130/80 mm/Hg</td>
<td>• LDL cholesterol: &lt;100 mg/dL</td>
</tr>
<tr>
<td>• Higher for:</td>
<td>• Research on benefits of lower blood pressure targets has shown mixed results</td>
<td>• &lt;70 mg/dL when overt CVD present</td>
</tr>
<tr>
<td>– Children/teens</td>
<td></td>
<td>• HDL cholesterol: &gt; 40 in men</td>
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<tr>
<td>– Recurrent hypoglycemia</td>
<td></td>
<td>• &gt; 50 in women</td>
</tr>
<tr>
<td>– Limited life expectancy</td>
<td></td>
<td>• Triglycerides: &lt;150 mg/dL</td>
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<tr>
<td>– Advanced complications/comorbidities</td>
<td></td>
<td></td>
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<tr>
<td>• Lower for pregnant women</td>
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Treatment: T1DM

- Insulin therapy
  - Fixed regimen
  - Flexible regimen (vary dose by food intake and activity level)
    - Multiple daily injections
    - Insulin pump
- Blood glucose monitoring (4+ times daily)
- Screening for and managing complications
Treatment: T2DM

• Combination/progression of:
  o Lifestyle modification
    ▪ More effective at prevention
    ▪ Can sometimes control diabetes after dx for a period of time
  o Oral medication
    ▪ Metformin is first-line medication
    ▪ Others added in different combinations
  o Insulin therapy
    ▪ Typically begins with long-acting insulin 1-2x daily
    ▪ Progression to short-acting insulin with meals
## Acute complications

<table>
<thead>
<tr>
<th></th>
<th>Hypoglycemia (low blood sugar)</th>
<th>Diabetic ketoacidosis (DKA)</th>
<th>Hyperglycemic hyperosmolar syndrome (HHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sx</strong></td>
<td>Headache, confusion, sweating, anxiety, loss of coordination, hunger, lethargy</td>
<td>Excessive thirst, rapid breathing, abdominal pain, fruity breath, vomiting, lethargy</td>
<td>Excessive thirst, weakness, lethargy, nausea, headache, confusion</td>
</tr>
</tbody>
</table>
| **Tx**              | • 15/15 Rule: Give 15 grams of glucose, repeat after 15 minutes  
                     • 4 t. sugar, 4 hard candies, 4 glucose tablets, 6 oz. juice or regular soda  
                     • If unable to take glucose, give glucagon injection  
                     • If no improvement, **treat as medical emergency** | Treat as medical emergency | |
| **Notes**           | More common in patients treated with insulin or sulfonylureas. | More common in T1DM. Rare in T2DM, triggered by illness. | More common in T2DM, particularly older adults. |
Long-term complications

Microvascular
- Retinopathy
- Neuropathy
  - Peripheral
  - Autonomic
- Nephropathy

Macrovascular
- Peripheral arterial disease
- Cardiovascular disease (MI, CHF)
- Cerebrovascular disease (stroke, TIA)

Other
- Diabetic foot ulcers (2° to peripheral arterial disease, ↓ sensation, ↓ wound healing)
- Infections (e.g. UTI, skin infections)

Leading cause of excess mortality in people with diabetes
# Common Diabetes Medications

<table>
<thead>
<tr>
<th>Function</th>
<th>Drug Classification</th>
<th>Trade Names</th>
</tr>
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<tbody>
<tr>
<td>Inhibit hepatic glucose output</td>
<td>Biguanides (Metformin)</td>
<td>Glucophage®, Glucophage XR®</td>
</tr>
<tr>
<td>Stimulate insulin release</td>
<td>Sulfonylureas (2nd gen.) (non-glucose dependent)</td>
<td>DiaBeta®, Micronase®, Glynase, Prestabs®, Glucotrol®</td>
</tr>
<tr>
<td></td>
<td>Glinides (glucose dependent)</td>
<td>Prandin®, Starlix®</td>
</tr>
<tr>
<td>Enhance insulin sensitivity</td>
<td>Thiazolidinediones* (TZDs, Glitazones)</td>
<td>Actos®, Avandia® (restricted due to adverse CVD effects)</td>
</tr>
<tr>
<td>Delay carbohydrate absorption</td>
<td>Alpha-glucosidase inhibitors</td>
<td>Precose®, Glyset®</td>
</tr>
<tr>
<td>Enhance incretin fx</td>
<td>GLP-1 agonists</td>
<td>Byetta®, Victoza® (injectables)</td>
</tr>
<tr>
<td></td>
<td>DPP-4 inhibitors</td>
<td>Januvia® (injectable), Onglyza®</td>
</tr>
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Insulin & Insulin Analogues

Types of insulin

- **Rapid-acting (before meals)**
  - Onset <15 min
  - Brand names: Humalog, Novolog, Apidra

- **Short-acting (before meals)**
  - Onset 30-60 min
  - Brand names: Humulin R (regular), Novolin R (regular)

- **Intermediate-acting (2x daily)**
  - Duration 10-16 hours
  - Brand names: Humulin N (NPH), Novolin N (NPH)

- **Long-acting (once daily)**
  - Duration 20-24 hours
  - Brand names: Lantus, Levemir

Lifestyle Change: AADE 7 Self-Care Behaviors

1. Healthy eating
2. Being active
3. Healthy coping
4. Problem solving
5. Risk reduction
6. Monitoring
7. Taking medication
Healthy Eating

• **Goals of intervention:**
  • Attain/maintain optimal ABC levels
  • Prevent/manage diabetes complications
  • Address individual nutrition needs
  • Address barriers to healthy eating
  • Maintain the pleasure of eating!
Healthy Eating

- **Role of OT:**
- Creating sustainable routines around meals
- Safety – adaptations in cooking
- Planning and meal preparation
- Grocery shopping
- Meaning of food and cooking
Benefits of Physical Activity:

- Improve insulin resistance (increase insulin sensitivity)
- Decrease LDL (bad) cholesterol
- Increase HDL (good) cholesterol
- Decrease triglycerides
- Decrease blood pressure
- Decrease risk for stroke, heart attack and diabetes complications

Being Active

Set SMART goals:
• Specific
• Measurable
• Attainable
• Realistic
• Time Sensitive

Physical activity recommendations:
• Resistance exercise 3 days per week
  AND EITHER
• ≥ 150 minutes/week of moderate intensity aerobic activity
  OR
• ≥ 75 minutes of high intensity aerobic activity

Being Active

Take precautions with complications:

- **Risk of hypoglycemia**
  - If blood sugar <150, have snack before exercise

- **Hyperglycemia**
  - Test for ketones when blood sugar >240; no strenuous activity if present

- **Retinopathy**
  - Heavy weight lifting and high impact activity contraindicated

- **LE sensory impairment**
  - Ensure good fitting footwear; inspect feet after exercise

- **Peripheral vascular disease**

- **Risk of CAD**

- **Autonomic neuropathy**

Healthy coping

Diabetes increases risk for:

• Stress
• Anxiety
• Depression
• Eating Disorders

Types of support:

• Emotional
• Informational
• Instrumental
• Affirmational
Healthy coping

Unhealthy Coping Mechanisms:
- Distraction
- Denial
- Substance abuse
- Behavioral disengagement
- Self blame

Healthy Coping Mechanisms:
- Humor
- Active coping
- Support
- Planning
- Acceptance
- Religion

Brief Cope, retrieved on October 7, 2011 from: http://www.psy.miami.edu/faculty/ccarver/sclBrCOPE.html
Monitoring

New occupations...

• Determine how frequently the patient needs to self monitor blood glucose (SMBG)
  o Incorporate into routines
  o Keeping a log
  o Identifying patterns

• Blood pressure
• Foot inspections
• Weight
• Activity level

Taking medications

• The patient should have an idea of how medication works in the body

• Know when, how and how much to take

• OTs can help their patients:
  • organize medication
  • track medications
  • embed into routines
  • identify environmental supports or barriers

Taking medications

- Oral medications
  - Single or combination therapy
- Non-insulin injectables
- Insulin
  - Basal, premixed, or short-acting
  - Delivery via syringe, pen, or pump
- Medications to meet ABC goals
  - Aspirin, anti-hypertensives, cholesterol lowering agents

Reducing risk

• Screen for complications
  o Each visit: BP, foot exam, depression
  o Every 3-6 months: A1C
  o Annually: lipids, albumin (kidney fx), eye exam

• Minimize cardiovascular risk
  o Achieving ABC targets
  o Smoking cessation
  o Stress reduction
  o Diet and physical activity

• Manage hypoglycemia and sick days

• Keep track
  o Appointments
  o Medical records & test results
Problem solving

• Assess readiness to change
• Assess literacy and cognitive level
• Problem solving:
  o Direct Instruction--clear problem, clear solution
  o OT / Patient collaboration
  o Patient as the problem solver
• Identify barriers and supports
• Incorporate into routines to increase consistency and sustainability
• Safety first!

Problem solving

• Stages of Change
  - Precontemplation
  - Contemplation
  - Preparation
  - Action
  - Maintenance
  - Relapse/recycle

• Motivational interviewing
  - Avoid arguing – roll with resistance
  - Support autonomy (invite participation, offer choice, gain consent)
  - Develop discrepancies – benefits of change, drawbacks of staying the same
Part I: Conclusion

• Questions and answers (5 min)
Case studies: Intervention approaches
Occupational Therapy Intervention

Diabetes impacts the individual’s personal, environmental, social, spiritual and physical well-being. In order to promote successful prevention and management, adaptations to daily routines and lifestyle may include:

- Developing healthy eating routines
- Creating a physical activity routine
- Monitoring blood sugar
- Monitoring blood pressure
- Medication management
- Low vision adaptations
- Adaptive equipment
- Environmental assessments and adaptations
- Foot examinations
- Scheduling appointments
- Healthcare management
Case Studies

• Outpatient private practice
  o “Lisa” – type 1 diabetes
  o “Melanie” – prediabetes
  o “Rosa” – type 2 diabetes

• Primary care: family medicine clinic
  o “Jose” – prediabetes

• Rehabilitation hospital
  o “Lydia” and “Tom” – diabetes post-stroke
  o “Betty” – diabetes post-spinal cord injury
  o “Edward” – diabetes with advanced complications
Diabetes and Occupation: “Lisa”

- 21 year old college junior, dx T1DM age 15
- Double majoring in theater and psychology
- Works part-time on campus
- Uses insulin pump and continuous glucose monitor
- Frustrated by difficulty losing weight
- Has been experiencing hypoglycemia at night and during activities
- Most recent A1C 8.2%
Diabetes and Occupation: “Lisa”

- On-the-go lifestyle:
  - Full-time classes and part-time job
  - Participates in school drama productions
  - Lots of activity: dance classes, rehearsals, going to gym, walking around campus
  - Likes to ‘party’ on weekends
- Feels self-conscious about diabetes self-care in public/attracting attention
- Doesn’t feel diabetes self-care recommendations work with her busy lifestyle
Diabetes and Occupation: “Lisa”

- Personal goals for Lisa:
  - Create more consistent routine for meals and snacks
  - Manage hypoglycemia while on-the-go
  - Improve glucose control overnight (avoiding lows)
  - Deflect questions from acquaintances about diabetes
  - Plan ahead of time for drinking at parties
Outpatient Private Practice
Diabetes “Lisa”

• Session Topics:
  • Healthy eating routines/strategies for eating out
  • Lifestyle balance
    • Developing bedtime routine/good sleep habits
    • Creating morning routine/eating breakfast
  • Time management
  • Stress management
  • Diabetes education
    • Drinking and blood sugar
    • Weight loss and diabetes
Outpatient Private Practice
Diabetes “Lisa”

• Behavior changes:
  • Stabilized nighttime glucose with consistent bedtime routine
  • Created more regular meal and snack times during the day
  • Planned strategies to monitor alcohol when out at parties with friends
  • Lost 5 lbs. while maintaining A1C below 8%
Prediabetes and Occupation: “Melanie”

• 35 year old female, BMI 26.7
• Dx of PCOS, glucose intolerance, metabolic D/O
• Mexican ancestry, father died of T2DM complications
• Recently decided not to pursue flight in aviation
• Increased feelings of depression leading to:
  o Increased binge eating (excessive sweets, esp. at night)
  o Weight gain
  o Decreased exercise
  o Decreased self-esteem
• Infertile
• Lives with boyfriend
Prediabetes and Occupation: “Melanie”

• Personal goals identified by client:
  o 15 lbs weight loss
  o Diabetes prevention
  o Healthy eating choices/healthier cooking
  o Have a career in aviation
  o Have a baby
Outpatient Private Practice
Prediabetes "Melanie"

Session Topics (8 sessions total, unlimited allowable)

• Pt. education on diabetes
• Healthy eating routines
• Physical activity
• Time management / appointment management
  o Nutritionist
  o Chiropractor
  o Fertility specialist
  o Psychologist
  o Physical therapist
• Stress management
• Assertive communication
Outpatient Private Practice
Prediabetes "Melanie"

Behavior changes
- Regular eating routine of 3 meals/day with F&V snacks
  - Decreased use of food as a coping mechanism for boredom, stress, anxiety and depression
  - No binge eating
- Regular exercise (reduced due to fertility Tx)
- Adaptation of social/family activities to be more health promoting
- Increased self-efficacy, improved mood, and decreased depression, anxiety and stress
- 5 lbs. weight loss
- Diabetes prevention
- Career in aviation
Diabetes and Occupation: “Rosa”

- 42 year old woman, BMI obesity class 3
- Diagnosed with T2DM for approx. 15 years
- Mexican and Jewish ancestry
- Referred to OT for lifestyle modification prior to gastric bypass surgery
- Weight loss necessary to control diabetes for surgery to remove tumor in genital area
- Surgery deemed dangerous at current weight of 463 lbs. (consultation for surgery at 480 lbs) without blood sugar control
Diabetes and Occupation: “Rosa”

- A1C 10.1%

- Diabetes complications:
  - nocturia
  - diabetic retinopathy
  - peripheral neuropathy
  - excessive thirst
  - fatigue
  - stress, anxiety, depression and confusion
Diabetes and Occupation: “Rosa”

- Decreased activity/walking tolerance due to tumor
- Poor self-image due to weight and tumor
- Decreased socialization, increased sedentary occupations
- On leave from Masters program
- Diabetes affected ability to work, socialize, perform ADLS, engage in home management, go out in public, and put a strain on marriage (husband had left).
Diabetes and Occupation: “Rosa”

• Personal goals identified by client:
  o Implement healthier eating routines
  o Increase physical activities
  o Increased tolerance for walking
  o Go out in public without drawing attention
  o Find clothes that fit
Outpatient Private Practice
Diabetes "Rosa"

Session Topics:
• Pt. education on diabetes
• Healthy eating routines
• Meal planning on a budget
• Physical activity
• Lifestyle Balance
  o adjust sleep routine
  o increased productivity (paying bills, home management, etc.)
• Stress management
• Assertive communication
Outpatient Private Practice
Diabetes "Rosa"

• Regular eating routine of 3 meals and F&V snacks (using smaller plates)
• Increased physical activity (wii fit, arm exercises while sitting)
• Use of C-Pap nightly
• Fitting into smaller clothing
• Decreased frequency and duration of naps throughout the day
• Increased level of comfort with going out in public due to decreased attention drawn
Outpatient Private Practice
Diabetes "Rosa"

- Decreased blood sugar levels
- Decreased insulin
- Better energy levels and decreased fatigue
- Improved mood and attitude
- Increased self-efficacy
- A1C 7.1%
- Decreased weight 41 lbs.
Medical History

- Steady weight gain over past few years
- Decreased physical activity & mobility (in last year especially)
- Decreased social engagement
- Increased stress

Long-term goal: lose 10lbs in one month
Family Medicine Clinic: “Jose”

• Session topics:
  o Current daily routine
    ▪ Eating routines
    ▪ Physical activity
    ▪ Environmental barriers
  o Incorporating healthy choices into existing routine
  o Social eating
  o Overcoming environmental barriers
Family Medicine Clinic: “Jose”

• Short-term goals:
  o Drink 6 cups of water per day
  o Have a healthy breakfast 5/7 days
  o Walk back from subway 4/7 days
  o Go swimming 1/7

• Supports: parents, co-workers, past experience
• Barriers: job environment, fatigue
Family Medicine Clinic: “Jose”

• Follow-up
  o Patient did not return to clinic for scheduled 1-month F/U
Occupational Therapy
for Special Populations
with Diabetes

Shanpin Fanchiang, Ph.D., OTR/L
Rancho Los Amigos National Rehabilitation Center
Special Populations

• Stroke

• Spinal cord injury (SCI)

• Amputation with Diabetes Mellitus
Special Populations

• Stroke

• Spinal cord injury (SCI)

• Amputation with Diabetes Mellitus
Your inpatient, **Lydia**, is a 65-year old woman with 10-year history of type 2 diabetes mellitus status post stroke with left hemiparesis. Her husband is a 66-year-old man, **Tom**, with a 20-year history of type 2 diabetes mellitus. He stated it is hard to care for his wife in functional transfer due to blurring of both near and distant vision that has worsened over the past two weeks.

In the past, his diabetes had been treated with oral medications, but his prescription expired 5 years ago and Tom has not had it refilled. Other than occasional over-the-counter medications for headaches and cold symptoms, he has not taken any medication.

You are about to discharge your inpatient, Lydia, and prepare to conduct patient/family education regarding health management. What should you address in the family-focused discharge program?
What proportion of stroke population has diabetes?
Chronic diseases among diabetics, nondiabetics, and all adult U.S. population, 2003

Add a diagnosis of CVD to diabetes and watch costs explode

What proportion of diabetic population have stroke?
Stroke Risk in Diabetes

Kaplan–Meier curves: Stroke in patients with type 2 diabetes mellitus, with and without previous cardiovascular disease (CVD), by sex.

Special Populations

- Stroke
- Spinal cord injury (SCI)
- Amputation with Diabetes Mellitus
Betty, a 42-year-old woman, had spinal cord injury. Her blood sugar used to be low, and she experienced hypoglycemia. Since she has been injured, it turned around. Instead of having morning blood sugars of 130-150, now her morning blood sugars are 200-300.

Diabetes runs in her family: her mother, brother, grandfather, and now her. Knowing that it is very similar to many patients with spinal cord injury, what will you, as an OT, do differently for your patient’s OT program, for those who have spinal cord injury who have also worked through adjustment issues?
Long Term SCI & Diabetes

- 20% of SCI survivors have type 2 diabetes
- SCI alters the body’s metabolism: muscle mass is lost and fat tissue increases.
- Inactivity impairs glucose tolerance; causes abnormal insulin levels.
- The older the patient, the greater the chance of developing diabetes since age-related changes are accelerated in SCI population.

www.craighospital.org/sci/mets/diabetes.asp last visit Oct 12, 2011
Special Populations

• Stroke

• Spinal cord injury (SCI)

• Amputation with Diabetes Mellitus
Edward is a 68-year-old man with an 18-year history of T2DM. He has long-standing diabetic neuropathy and has had an ulcer over his fifth metatarsal head at the site of a former callus for 1 month. Because the ulcer was painless, he did not initially seek medical attention.

During the past week, there has been increased drainage from the ulcer and erythema around the ulcer site. The ulcer is about 1 cm, appears to be moderately deep with foul-smelling drainage. He does not want to have foot surgery and prefers other types of intervention. In addition, his hypertension is not well-controlled.

Occupational therapy consultation is requested. What do you think OT should focus on?

Erythema is a skin condition characterized by redness or rash.
Foot Amputation in Diabetes

- Incidence of diabetic foot ulcers: 5.3-7.4%
- 9%-20% of people with diabetes have a new amputation within 12 months after an amputation
- 5 yrs following 1st: 28%-51% had 2nd amputation
- Perioperative mortality (death <30 days) among diabetic amputees averaged 5.8%
- Five-year mortality following amputation was 39%-68%
The Goal for Occupational Therapy Intervention

To incorporate Diabetes Self-Management Education (DSME)

Lydia/Tom?
Betty?
Edward?
Diabetes Self Management
- Ecological approach
- Years with diabetes

Special Populations
- Severity
- 2nd prevention

Factors to consider
- Occupational Performance
- Client/family-centered

OT Intervention
Individualized OT Assessment – Factors to Consider

- **Health literacy** – learning styles
- **Cultural Diversity** – meaning of illness
- **Age/gender** – muscle mass, changes
- **On the Job Environment** – med management
- **Family & Social Support** – health promotion, motivation
- **Duration of Diabetes** – status of complications
- **Previous effort** in diabetes self-care
Individualized OT Assessment – Factors to Consider

- **Health literacy** – learning styles
- **Cultural Diversity** – meaning of illness
- **Age/gender** – muscle mass, changes
- **On the Job Environment** – med management
- **Family & Social Support** – health promotion, motivation
- **Duration of Diabetes** – status of complications
- **Previous effort** in Diabetes Self-Care
Health Literacy

The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.

It is “RUDD”.

_Read, Understand, & Do Diligently._

Health Literacy & Diabetes

Inability to interpret low blood sugar values

* Gazmararian, 1997
# Health Literacy & Diabetes

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<tr>
<th></th>
<th>Adequate Literacy</th>
<th>Inadequate Literacy</th>
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<tbody>
<tr>
<td><strong>Tight Glycemic Control</strong></td>
<td>33%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Poor Glycemic Control</strong></td>
<td>20%</td>
<td>30%</td>
</tr>
</tbody>
</table>

*Schillinger, et al. 2002*
Individualized OT Assessment – Factors to Consider

- **Health literacy** – learning styles
- **Cultural Diversity** – meaning of illness
- **Age/gender** – muscle mass, changes
- **On the Job Environment** – med management
- **Family & Social Support** – health promotion, motivation
- **Duration of Diabetes** – status of complications
- **Previous effort** in Diabetes Self-Care
Cultural Diversity & Diabetes

- Notice that **cultural norms** may affect
  - how a disease is perceived &
  - how healthcare communication is done.

- Be aware of culturally specific language & metaphors.

- Incorporate patients’ metaphors to make the care more meaningful and relevant to them.

* Huttlinger et al., 1992
Cultural Diversity & Diabetes

- Adapt communication styles during clinical encounters ➔ ask processes

  “Can you tell me how you take your medicine every day?”

  “How many times per week do you miss taking your medication?”

  vs. “Do you take your medicine every day?”

* Huttlinger et al., 1992
Individualized OT Assessment – Factors to Consider

- Health literacy – learning styles
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- Family & Social Support – health promotion, motivation
- Duration of Diabetes – status of complications
- Previous effort in Diabetes Self-Care
Age and Diabetes

- >40 yr old ➔ more likely to get type 2 diabetes
- Age ➔ Increased insulin resistance
- **Lifestyle factors** contributing to age-associated decrease in insulin sensitivity include:
  - dietary changes: higher intake of saturated fat and simple sugars
  - reduced physical activity: less skeletal muscle mass and reduced strength

Estimated Prevalence of Diabetes in U.S.

Adult Men and Women

Age (Years)

Percent of Population

Men
Women

20-39 40-49 50-59 60-74 75+

1.6 6.8 12.9 20.2 21.1
1.7 6.1 12.4 17.8 17.5

Adapted from: Harris et al. Diabetes Care. 1998;21:518-524
Individualized OT Assessment – Factors to Consider

- **Health literacy** – learning styles
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Individualized OT Assessment – Factors to Consider

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- Family & Social Support – health promotion, motivation
- Duration of Diabetes – status of complications
- Previous effort in Diabetes Self-Care
Tools for Intervention
What have you been doing?

Revised Rating Category, **Activity Card Sort**

1. I do not do it. [Never did.]
2. I do it on and off, once in a while.
3. I have been doing it as much as I can.
4. I have given it up. [Did it in the past.]

To assess previous effort in diabetes management
Patient/Family Education

- Provide information for the patient, family education, based on their needs (i.e. written, pictures, proper literacy level, etc.) Will they be open to peer support?
- "Teach back": “I’d like to make sure what we discussed is clear to you. Please help by telling me what our discussion points were.”
- Know where to go for information updates (i.e. clinics, support groups, follow-up needs, medicine advancement...etc.)
Tools for Intervention

Using ETAC to Measure Actionable Diabetes Management Activity
For Collaborative Goal Setting

Ask: “Can you see yourself doing….?”

A. I will not do it
B. I'll think about it
C. I’ll think about ways to help me start doing it
D. I’ll start doing it from now on
E. I have done some but can still do more
F. I am doing it as much as I can; no changes are needed.

ETAC: Empowered To Act Consistently
Behavioral Changes Here and Now

Use **ETAC** and do daily follow-up:
“**Do you see yourself ...?**”

**Examples:**
- Leaving my juice pack on my tray.
- Asking my nurse about my blood glucose level.
- Doing my daily walking meditation.
- Making a journal about my feelings.
- Looking for a quality website about diabetes once a week
- ...
1. **Occupational Profile** –
   occupational history/role,
   patient/family goals specific to diabetes

2. **Precautions** –
   medical, diet, spinal stability, orthopedic

3. **ADLs** –
   PAI (Functional Independent Measure) –
   portion control, finger method? Plate method?
   know what to check - their shoes/feet,
   oral hygiene,
   poly-pharmacy-when to order meds,
   One handed techniques for insulin injection...
DSME - OT Evaluation/Intervention

4. Sensation / Pain –
   for LEs, Pain $2^{o}$ peripheral vascular disease

5. Vision/Perception –
   low vision evaluation, peripheral vision loss, compensatory strategies, home vision monitoring strategies

6. Range of Motion/Motor Control/Strength –
   specific to the diagnosis, must consider the context where the patient is
Foot Care for People with Diabetes

1. Wash your feet daily with lukewarm water and soap.
2. Dry your feet well, especially between your toes.
3. Keep your skin supple with a moisturizing lotion, but do not apply between your toes.
4. Check your feet for blisters, cuts or sores. Tell your doctor if you find something wrong.
5. Use emery board to shape your toenails.
6. Change daily into clean, soft socks or stockings, not too big or too small.
7. Keep your feet warm and dry. Wear special padded socks and always wear shoes that fit well.
8. Never walk barefoot indoors or outdoors.
9. Check your shoes every day for cracks, pebbles, nails or anything that could hurt your feet.

Disclaimer: This information is intended for your use as appropriate. There are other possible options. Always speak to your doctor, nurse, or other persons who you see for your health care needs if you have any questions.

Provided as a courtesy by:
Rancho Los Amigos National Rehabilitation Center
Patient Education • 7601 E. Imperial Highway • Downey, CA 90242
Phone: 1-877-RANCHO-1 • FAX: 562-401-6690 • http://www.rancho.org
DM0004FootCareForPeopleWithDM.WPD   9/25/03
Foot Check

Looking for:
- Redness
- Blisters
- Corns
- Calluses
- Cuts
- Is the stomach in the way?
- Decreased vision for checking?
Best Therapy: Prevention!
DSME - OT Evaluation/Intervention

7. General Endurance –
   “warm & slightly out of breath” or max. heart rate, linking with relaxation/meditation

8. Functional Cognition –
   Can be limited due to diabetes complications

9. Home and Community Participation –
   Monitor blood glucose when out of home
   Exercise program? Driving prep?
   Family-centered diabetes management?
   Communication during holiday season?
If you have diabetes mellitus (high blood sugar) and are taking insulin or an oral hypoglycemic medicine*, you may be at risk for having low blood sugar (hypoglycemia). Symptoms of hypoglycemia (defined as a blood sugar below the normal range below 70 mg/dl) may include:
- sweating
- shakiness
- anxiety
- heart palpitations
- weakness
- confusion (sometimes).

These symptoms usually do not appear until your blood sugar drops below 45 mg/dl. Low blood sugar can affect your judgment and ability to drive**. The tips below should help prevent low blood sugar while you are driving.

**Keep your blood sugar level as stable as possible.**

Plan your trip carefully. Try to eat the same kinds and amounts of food that you normally would at home. Try not to change the time you eat. Try not to miss a meal or snack.

**How much time do you need before you get there?**

Plan your trip carefully. How far will you drive? What will the traffic conditions be during the time you are on the road? Make sure your blood sugar level will be in a safe range until your arrival. During a long trip, you want to be certain your blood sugar is stable and above 100 mg/dl.

* An oral hypoglycemic agent, such as glyburide (Micronase®, Glynase®, DiaBeta®; glipizide (Glucotrol®); glimepiride (Amaryl®); repaglinide (Prandin®); nateglinide (Starlix®); metformin (Glucophage®); pioglitazone (Acto®), and rosiglitazone (Avandia®). Combination products, such as glyburide/metformin (Glucovance®) and glipizide/metformin (Metaglip®) are also hypoglycemic agents.

**Please note: doctors are required by law to report patients to the Department of Motor Vehicles (DMV) when those patients have medical conditions which may impair their driving. Keeping your blood sugar within normal levels will help to keep yourself, your passengers, and others who share the road with you safe.

Provided as a courtesy by:

**Rancho Los Amigos National Rehabilitation Center**
Patient Education • 7601 E. Imperial Highway • Downey, CA 90242
Phone: 1-877-RANCHO-1 • FAX: 562-401-6690 • [http://www.rancho.org](http://www.rancho.org)
DSME - OT Evaluation/Intervention

10. Safety Related Emergency Management – hypoglycemia unawareness?

11. Health Management Training/Directing Care
    Medication management, health records, blood glucose monitoring records, updates, missing a dose of medication

2nd Prevention
Hypoglycemia related
DSME - OT Evaluation/Intervention

12. Energy Conservation & Work Simplification
13. Training in Community Resources Utilization
   Support groups, ethnic-specific information, patient/family centered approach - asking preferences, lifelong learning habits?
14. Patient/Family Education
   Structure them as part of the routine
15. Adaptive Equipment
   Setup for reminders
Recap

• Incidence and prevalence of DM in stroke, SCI patients
• Longevity of patients with diabetic foot amputation
• Factors to consider for OT intervention
• Incorporating DSME in OT intervention
• Behavioral changes you can negotiate with your patients…
Part 2: Conclusion

• Questions and answers (5 min.)
• BREAK! (15 min.)
Part 3

Reimbursement, Advocacy & Healthcare Reform
Outpatient Private Practice Setting

- Coding and billing
- Reimbursement rates from different payers
- Special contracts
- Effective Marketing
# Payers

<table>
<thead>
<tr>
<th>Payer</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare, PPO</td>
<td>Physician prescription for OT and Dx CPT code</td>
</tr>
<tr>
<td>Private pay</td>
<td>Client can self-refer, no Dx code necessary</td>
</tr>
<tr>
<td></td>
<td>• 35% Discount offered</td>
</tr>
<tr>
<td>Self-insured corporations</td>
<td>Specific contract with its own set of requirements</td>
</tr>
</tbody>
</table>
Coding

- 97003 Initial Evaluation
- 97004 Re-Evaluation
- 97150 Therapeutic Group
- 97532 Development of Cognitive Skills
- 97530 Functional/Therapeutic Activity
- 97535 ADL’s
- 97537 Community/Work Reintegration
- *97533 S.I. Tech
## Average Reimbursement Rates 2010

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Charge Amt.</th>
<th>Avg. Payment from Medicare &amp; PPOs</th>
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</thead>
<tbody>
<tr>
<td>97003</td>
<td>Initial Evaluation</td>
<td>$210</td>
<td>$77-112</td>
</tr>
<tr>
<td>97004</td>
<td>Re-Evaluation</td>
<td>$130</td>
<td>$30-67</td>
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<tr>
<td>97150</td>
<td>Therapeutic Group</td>
<td>$50</td>
<td>$21-27</td>
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<tr>
<td>97532</td>
<td>Dev. Cognitive Skills</td>
<td>$70/unit</td>
<td>$30-35</td>
</tr>
<tr>
<td>97530</td>
<td>Functional/Therapeutic Activity</td>
<td>$40/unit</td>
<td>$30-45</td>
</tr>
<tr>
<td>97535</td>
<td>ADLs</td>
<td>$90/unit</td>
<td>$31-45</td>
</tr>
<tr>
<td>97537</td>
<td>Community/Work Reintegration</td>
<td>$80/unit</td>
<td>$31-40</td>
</tr>
<tr>
<td>*97533</td>
<td>S.I. Tech</td>
<td>$70/unit</td>
<td>$32-39</td>
</tr>
</tbody>
</table>
Melanie – Cigna PPO

Patient's OT benefits:

- unlimited sessions
- $15 co-pay
- no co-insurance
- MD script/referral with Dx required
- Dx: metabolic disorder & glucose intolerance
Melanie – Cigna PPO

Dx:  Impaired fasting glucose 790.21
    Unspecified disorder metabolism 277.9

- Charged: 1 eval (97003) for $210
- Paid: $115.48 by Cigna + $15 from client
  - Also charged 2 units of ADLs (97535) for $180
  - Paid $80.74 by Cigna
  - Total payment = $115.48 + $15 + $80.74 = $211.22

Subsequent visits:
- Charged: 4 units fx therapeutic activity (97530) for $160
- Paid: $145 by Cigna + $15 from client = $160 total
  x 7 sessions
Rosa – Aetna PPO

Rosa’s OT Benefits:

• Required to complete 8 sessions for authorization for bariatric surgery
• No co-pay
• 10% co-insurance
• MD script/referral with Dx required
• Dx: morbid obesity & arthritis
Rosa – Aetna PPO

- Charged: 4 units of functional therapeutic activity (97530) for $160

- Paid: $117.40 + $13.04 from client = $130.44

x 8 sessions
Self-Insured Corporation

• Example: USC Network Insurance

• Contract for Weight Management Program
  o Members can self-refer
  o Financial incentive for good attendance and good clinical outcomes
Education and Communication about Services: Marketing

• Most health professionals in various settings (physicians, nurses, dieticians, etc.) don’t know that OT offers valuable treatment for diabetes

• Most patients/consumers don’t know about OT’s services for diabetes
Education and Communication about Services: Marketing

Approaches for referring health professionals:

- Credibility
  - Appropriate brochures, materials, etc.
  - Useful and visible presentations

- Efficacy
  - Share clinical outcomes when available
  - Send documentation regarding patients’ progress
    - Fax evaluation summary and progress summaries every 8 weeks

- Networking
  - Develop ongoing relationships
  - Attend events, invite to lunches
Education and Communication about Services: Marketing

Marketing approaches for **consumers**:

- Attract interest and increase visibility
  - Appropriate and consistent collateral
  - E-newsletters and announcements via email
  - New and free events
- Be accessible and convenient
  - Costs
  - Clinic hours
  - Ease of scheduling
  - Parking
Hello and Happy Autumn!

As life gets busy this season, it's the perfect time to make sure you're taking care of you. We are now offering $15 Weight Management groups to ALL USC employees! Call or email today to sign up for a group starting in October.

HSC
Wednesdays at noon, beginning 10/19
We still have spaces left in several of our Fall Weight Management Groups - Reserve now!

University Park Campus (UPC)
- Wednesday 5:30 p.m. starts September 21
  Location: Center for Occupation and Lifestyle Redesign (Hoover & 27th Street)
- Thursday 12:00 p.m. starts September 29
  Location: To be determined

Health Science Campus (HSC)
Location: Occupational Therapy Faculty Practice
2250 Alcazar Street, CSC-133
Los Angeles, CA 90089

To join a group, schedule individual sessions, or find out if Lifestyle Redesign is a good fit for you, please call 323-442-3340 or email otftp@usc.edu

USC’s DTF Practice is a health coaching facility located on both USC campuses. The center is open to faculty, staff, students and the larger LA community. Our Licensed OT’s are ready to spend the time you need to help you solve and manage your individual health issue.

What is Lifestyle Redesign®?
Lifestyle Redesign® is a customized process to improve your health and well-being. Find more on our website...
USC OTF Practice
On Campus Health & Wellness Coaching for Students

Take advantage of a great USC resource designed to help students create healthy, balanced lifestyles.

Are you experiencing:
- Excess Stress
- Weight Gain
- Diabetes/Pre-diabetes
- Chronic Pain or Headaches
- Social or Dating Anxiety
- Trouble Focusing or Studying
- Problems with Procrastination
- Problems Adjusting to Campus Life
- Difficulty Balancing Your Life
- A Desire to Stop Smoking

USC's OTF Practice can help. USC's OTF Practice is a health coaching facility located on both campuses. The center is open to students and covered by most insurance plans, including USC student health insurance.

To receive a free consultation via email, phone, or in person, please call our office at 323-442-3340 (8:30am-5:30pm) or email OToncall@usc.edu (anytime). We can also schedule consultations outside of normal business hours, and can meet you at your dorm, job, gym, café, library, or wherever else on campus is convenient for you.

Locations:
- Center for Occupation and Lifestyle Redesign
  2053 S. Hoover Street
  Los Angeles, CA 90007
- USC Occupational Therapy Faculty Practice
  2250 Alcazar Street
  CRC 113
Review Ad

Please review your ad for accuracy.

Ad Preview:

Having Trouble Dealing?


Ad Name: Having Trouble Dealing?

Audience: This ad targets users:
- who live in the United States
- who live within 50 miles of Los Angeles, CA
- between the ages of 18 and 30 inclusive
- who are at USC

Campaign: Having Trouble Dealing? (New Campaign)

Bid Type: CPM in Ad Space

Bid: $0.25 USD per thousand impressions.

Daily Budget: $50.00 USD per day

Duration: 10/04/2011 9:00am to 10/07/2011 5:00pm Pacific Time

Place Order Edit Ad
Healthcare Reform
Healthcare Reform

The Goals of Healthcare Reform:

• Coverage
• Quality
• Cost
Healthcare Reform

Coverage
- Medicaid expansion (Medi-Cal)

Source: www.cdc.gov
Healthcare Reform

Coverage

- Medicaid expansion (Medi-Cal)

Source www.cdc.gov
Healthcare Reform

Coverage

- Individual mandate
- No denial of pre-existing conditions
- No lifetime caps on benefits
- Coverage until age 26
Healthcare Reform

Quality

Primary Care Redefined

- the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community
Healthcare Reform

- **Patient Centered Medical Home (PCMH)**
  - Primary care delivery
  - Prevention and wellness
  - Chronic care management
  - Coordination of spectrum of care delivery
  - Improving individual involvement in determining health outcomes
    - Whole person orientation across the lifespan
      - Co-location of OT services

- **Patient Centered Medical Home Neighbor**
  - Patients are co-managed by PCMH and OT “Neighbor”
Healthcare Reform

Accountable Care Organizations (ACOs)

- Network of providers who share responsibility for management and coordination of a patient’s spectrum of care
- Shared cost savings
Healthcare Reform

Federally Qualified Health Center (FQHC)
- Publically funded health center
- Financial incentives within the ACA

Focus on Prevention
- Annual Wellness Visit with Personalized Prevention Plan
- National Diabetes Prevention Program

Medication Management
Healthcare Reform

Cost!

- Cost of Diabetes in the United States (2009)
  - $174 billion:
    - $116B in direct costs of treatment
    - $58.3B in lost productivity

- Well Elderly I & II
  - Preventive occupational therapy is cost effective in reducing healthcare utilization and improving health outcomes and life satisfaction
Healthcare Reform

Changing Models of Reimbursement

1. Quality indicator for PCMH designation by: National Committee for Quality Assurance (NCQA)
2. Cost-savings - longitudinal impact as the result of improved continuity of care and medical resource management
3. Invaluable member of the team!
Healthcare Reform

NCQA Recognized PPC-PCMH Sites

As of 12/31/10

1,506 PPC-PCMH SITES

0 Sites
1-20 Sites
21-60 Sites
61-200 Sites
201+ Sites
## NCQA PCMH 2011

6 Standards, 27 Elements, 149 Factors

<table>
<thead>
<tr>
<th>Points</th>
<th>Standard and Element</th>
<th>No. Factors</th>
<th>Must Pass 50% Score</th>
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<tbody>
<tr>
<td>20</td>
<td>1 Enhance Access and Continuity</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>A Access During Office Hours</td>
<td>4</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>B Access After Hours</td>
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<td>2</td>
<td>C Electronic Access</td>
<td>6</td>
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<td>2</td>
<td>D Continuity</td>
<td>3</td>
<td></td>
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<tr>
<td>2</td>
<td>E Medical Home Responsibilities</td>
<td>4</td>
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<td>2</td>
<td>F Culturally and Linguistically Appropriate Services (CLAS)</td>
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<td>4</td>
<td>G Practice Organization</td>
<td>8</td>
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<tr>
<td>17</td>
<td>2 Identify and Manage Patient Populations</td>
<td>35</td>
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<tr>
<td>3</td>
<td>A Patient Information</td>
<td>12</td>
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</tr>
<tr>
<td>4</td>
<td>B Clinical Data</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>C Comprehensive Health Assessment</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>D Using Data for Population Management</td>
<td>4</td>
<td>X</td>
</tr>
<tr>
<td>17</td>
<td>3 Plan and Manage Care</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>A Implement Evidence-Based Guidelines</td>
<td>3</td>
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</tr>
<tr>
<td>3</td>
<td>B Identify High-Risk Patients</td>
<td>2</td>
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<tr>
<td>4</td>
<td>C Manage Care</td>
<td>7</td>
<td>X</td>
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<tr>
<td>3</td>
<td>D Manage Medications</td>
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<tr>
<td>3</td>
<td>E Electronic Prescribing</td>
<td>6</td>
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<tr>
<td>9</td>
<td>4 Provide Self-Care and Community Support</td>
<td>10</td>
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<tr>
<td>6</td>
<td>A Self-Care Process</td>
<td>6</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>B Referrals to Community Resources</td>
<td>4</td>
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</tr>
<tr>
<td>18</td>
<td>5 Track and Coordinate Care</td>
<td>25</td>
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<td>6</td>
<td>A Test Tracking and Follow-up</td>
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<tr>
<td>6</td>
<td>B Referral Tracking and Follow-up</td>
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<tr>
<td>6</td>
<td>C Coordinate with Facilities/Care Transitions</td>
<td>8</td>
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<tr>
<td>20</td>
<td>6 Measure and Improve Performance</td>
<td>22</td>
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<td>4</td>
<td>A Measures of Performance</td>
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<tr>
<td>4</td>
<td>B Patient/Family Feedback</td>
<td>4</td>
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<td>4</td>
<td>C Implements Continuous Quality Improvement</td>
<td>4</td>
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<td>3</td>
<td>D Demonstrates Continuous Quality Improvement</td>
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<td>3</td>
<td>E Performance Reporting</td>
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<td>F Report Data Externally</td>
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100 Points

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<tr>
<th>Factors</th>
<th>Elements</th>
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</thead>
<tbody>
<tr>
<td>149</td>
<td>6 MP</td>
</tr>
</tbody>
</table>
Healthcare Reform

Be an invaluable member of the team!

The USC OS/OT Division is participating in the CIC collaboration by:

1. Contributing to the development of the health promotion and wellness components of the ACO
2. Developing the Patient-Centered Medical Home (PCMH) primary care team model with Family Medicine that will be implemented as part of the ACO
Healthcare Reform

Cost savings - longitudinal impact as the result of improved continuity of care and medical resource management

• Measures of success for PCMH:
  o ER visits
  o Hospitalizations
  o Patient and provider satisfaction
  o Improved process – EMR, tele-health
  o Quality of care – better chronic disease management
    (Biometrics: BMI, hemoglobin A1C, LDL, immunizations…)

• Examples: Galaxy-Care, GroupHealth, CIC
Healthcare Reform

What can YOU do?

• Contact your Department of Public Health
• Meet with your legislative representatives, introduce OT and ask what your community is doing to improve health outcomes
• Find out what demonstrations/pilots are occurring in your area
• On the ground advocacy – contact local primary care clinics, community health centers to find out what they are doing and how OT can become involved
• AOTA resources – Legislative Action Center, OT Connections, AOTA factsheets
Become a CDE

Requirements:

• Licensed and registered OT
• Practiced for approximately 2 years
• 1,000 hours of diabetes pt. education within 4 years of examination
• Minimum of 40% (or 400 hours) of the 1,000 hours of DSME practice experience been accrued within the year prior to examination
• Completed 15 hours of continuing education applicable to diabetes within the past 2 years
• Pass examination to become CDE

***New CDE Mentor Program to increase contact hours