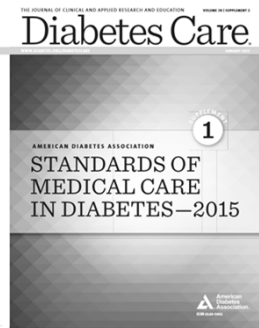


Goals of Care – ADA 2015



Diabetes Education
SERVICES

ADA Standards of Care 2015



Diabetes Education
SERVICES

Objectives

- ▶ Review the 14 Standards of Care to the best of our ability in 90 minutes!



Diabetes Education
SERVICES

1. Strategies for Improving Care

- ▶ **Based on a recent report by the CDC**, <7% of privately insured adults with newly diagnosed diabetes from 2009 to 2012 joined a self-management education and training program.
- ▶ **Consider Chronic Care Model**
 1. Optimize Provider and Team Behavior
 2. Support Patient Behavior Change
 3. Change the Care System



Diabetes Education
SERVICES

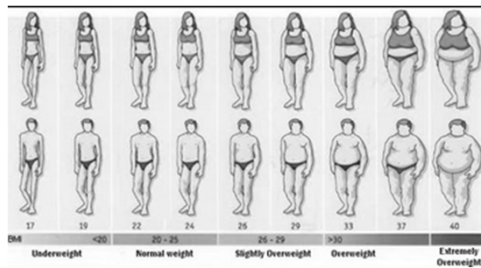
1. Keep it Patient Centered

- ▶ “it is clear that optimal diabetes management requires an organized, systematic approach and the involvement of a coordinated team of dedicated health professionals, working in an environment where patient centered care is a high priority”.



Diabetes Education
SERVICES

BMI Categories

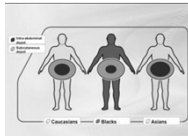


Diabetes Education
SERVICES

2. Classification and Diagnosis of Diabetes - Update

► Screening criteria update for Asian Americans: BMI ≥ 23

- the cut point for screening Asian Americans for prediabetes and type 2 diabetes is **now a BMI ≥ 23 (vs 25)** to reflect the increased risk of diabetes at a lower BMI level relative to the general population.



Diabetes Education
SERVICES

3. Initial Eval and Diabetes Management Planning

► Medical Evaluation

1. Classify diabetes
2. Detect diabetes complications
3. Review previous treatment and risk factor control
4. Assist in formulating a management plan
5. Provide a basis for continuing care



Diabetes Education
SERVICES

3. Initial Eval – Conditions to look for

- Type 1 - Autoimmune diseases
- Other conditions that may appear Type 1 / 2
 - Depression and anxiety
 - Obstructive sleep apnea
 - Fatty liver disease
 - Cancer
 - Fractures
 - Cognitive impairment
 - Low Testosterone in Men
 - Periodontal disease
 - Hearing Impairment



Diabetes Education
SERVICES

4. Foundations of Care

- ▶ Education –
 - ▶ Setting Up Successful Diabetes Ed Program – Level 2
- ▶ Nutrition
- ▶ Physical Activity
 - ▶ Nutrition and Exercise Course – Level 1
- ▶ Smoking Cessation
- ▶ Psychosocial Care
- ▶ Immunization



Diabetes Education
SERVICES

4. Education

- ▶ People with diabetes and pre diabetes should receive DSME
 - ▶ Monitor for effective self-management and quality of life
 - ▶ Address psychosocial issues and emotional well being
 - ▶ Results in cost savings and improved outcomes, should be reimbursed by third party payers.



Diabetes Education
SERVICES

4. Exercise Recommendations

- ▶ **Activity update –Don't sit more than 90 minutes**
- ▶ Evidence supports that everyone, including with diabetes should be encouraged to reduce sedentary time, by not sitting for more than 90 minutes at a time.
- ▶ It is recommended that people with pre diabetes and diabetes engage in 150 minutes of activity a week and at **least 2 weekly sessions of resistance exercise.**



Diabetes Education
SERVICES

Good Exercise Info / Quotes



- ▶ 20 % of people walk 30 mins a day
 - ▶ Exercise decrease A1c 0.7%
 - ▶ No change in body wt, but 48% loss in visceral fat
 - ▶ ADA PostGrad 2010
- "If you don't have time for exercise, you better make time for disease."
 - "I don't have time to exercise, I MAKE time."

Mike Huckabee

Best Shake For People with Diabetes



"The only diet shake I recommend is the shake your booty makes when you exercise."

From Debbie Nagata's slide collection



Diabetes Education
SERVICES

4. Vaccinations- Immunizations

- ▶ Influenza vaccine
 - ▶ every year starting at age 6 months
- ▶ Hepatitis B Vaccine
 - ▶ For diabetes pts age 19 – 59 (not previously vaccinated)
 - ▶ Double risk of Hep B due to lancing devices/ glucose meter exposure



Diabetes Education
SERVICES

4. Pneumonia Vaccinations

- ▶ Pneumonia polysaccharide PPSV23 vaccine to all patients starting at age 2
- ▶ **Adults ≥ 65 years of age**, if not previously vaccinated, should receive pneumococcal conjugate vaccine 13 (PCV13), followed by PPSV23 6-12 months after initial vaccination.
- ▶ **Adults ≥ 65 years of age**, if previously vaccinated with PPSV23 should receive a follow-up ≥ 12 months with PCV13.



Diabetes Education
SERVICES

4. E- Cigarettes

- ▶ Not supported as an alternative to smoking or to facilitate smoking cessation.



The uptake of e-cigarettes, which use battery-powered cartridges to produce a nicotine-laced vapor (and often contain other bad stuff)



Diabetes Education
SERVICES

4. Smoking and Diabetes

Smoking increases risk of diabetes 30%



- Ask at every visit
- Assess
- Advise
- Assist with stop smoking
- Arrange for referrals
- Organize your clinic



Diabetes Education
SERVICES

5. Prevention or Delay of Type 2

- ▶ Patients with prediabetes
 - ▶ Refer to behavioral counseling /DSME program to:
 - ▶ Focus on intensive diet and physical activity
 - ▶ Weight loss target of 7%
 - ▶ Increase physical activity to 150 minutes a week
 - ▶ Follow-up counseling critical for success
 - ▶ Consider Metformin for type 2 prevention
 - ▶ if A1c 5.7-6.4
 - ▶ Especially for those with BMI >35 and hx of GDM
 - ▶ Monitor annually and screen and mitigate modifiable CV risk factors



Diabetes Education
SERVICES

Can we stop pre diabetes from progressing?

3, 234 people w/ Pre-Diabetes randomized:

- ▶ Placebo
- ▶ Diet/Exercise or
- ▶ Metformin

over a three year period

Diabetes Prevention Program (DPP) 2001



Diabetes Education
SERVICES

Diabetes Prevention Program

- ▶ Standard Group - 29% developed DM
- ▶ Lifestyle Results - 14% developed DM
 - ▶ 58% (71% for 60yrs +) Risk reduction
 - ▶ 30 mins daily activity
 - ▶ 5-7% of body wt loss
- ▶ Metformin 850 BID - 22% developed DM
 - ▶ 31% risk reduction (less effective with elderly and thinner pt's)



Diabetes Education
SERVICES

Weight loss and Prevention

- ▶ For every 2.2 pounds of weight loss, risk of type 2 diabetes was reduced by 13%.



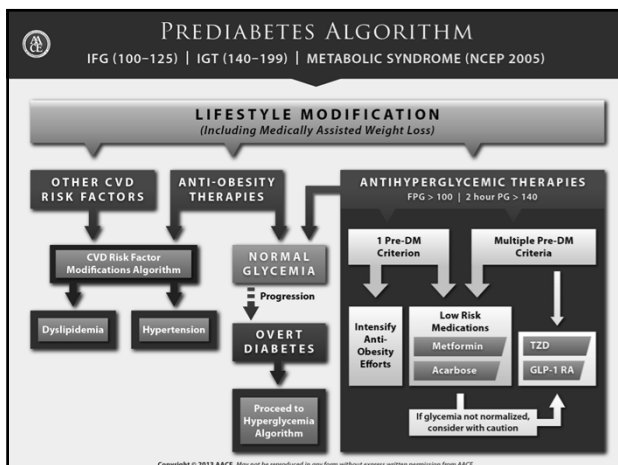
Diabetes Education
SERVICES

Have Pre-Diabetes? Steps to Prevent Type 2

- ▶ Lose 7% of body weight
 - ▶ Healthy eating, high fiber, low fat, avoid sugar sweetened beverages, reduce total caloric intake
- ▶ Exercise 150 minutes a week
- ▶ Consider Metformin Therapy for
 - ▶ Women with history of GDM
 - ▶ Patients with BMI of 35 or greater
 - ▶ Under the age of 60
- ▶ Follow-up and group education
- ▶ Annual monitoring and tx of CVD risk factors



Diabetes Education
SERVICES



ABC's of Diabetes

A1C

Blood Pressure

Cholesterol

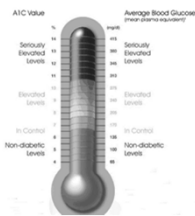


Diabetes Education
SERVICES

6. Glycemic Targets

▶ Adult non pregnant A1c goals

- ▶ **A1c < 7%** - a reasonable goal for adults.
- ▶ **A1c < 6.5%** - may be appropriate for those without significant risk of hypoglycemia or other adverse effects of treatment.
- ▶ **A1c < 8%** - may be appropriate for patients with history of hypoglycemia, limited life expectancy, or those with longstanding diabetes and vascular complications.



Diabetes Education
SERVICES

6. Pediatric Glycemic Targets-2015

▶ A1c goal <7.5 % for all ages;

- ▶ however individualization is still encouraged.
- ▶ A lower goal, <7% if can be achieved w/out excessive hypoglycemia

▶ Blood glucose goals

- ▶ Before meals: 90-130
- ▶ Bedtime/overnight: 90-150



Diabetes Education
SERVICES

6. A1c Goals for Non Pregnant Adults Individualize Targets – ADA

- ▶ < 7% for patients *in general*
- ▶ For individual pts, as close to normal as possible (<6.5%) w/out significant hypo*
- ▶ Frequency:
 - ▶ If pt meeting goal - At least 2 times a year
 - ▶ If pts *not* meeting goal – Quarterly



Diabetes Education
SERVICES



AAACE COMPREHENSIVE DIABETES MANAGEMENT ALGORITHM 2013

TASK FORCE

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GOALS FOR GLYCEMIC CONTROL

A1c ≤ 6.5%

For healthy patients
without concurrent
illness and at low
hypoglycemic risk

A1c > 6.5%

Individualize goals
for patients with
concurrent illness
and at risk for
hypoglycemia

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6. A1c Test

- ▶ Measures glycation of RBC's over 2-3 months
- ▶ Weighted mean (50% preceding month)
- ▶ Each 1% ~ 29mg/dl
- ▶ Accuracy: affected by some anemias, hemoglobinopathies
- ▶ A measurement of glucose in fasting and postprandial states
- ▶ African Americans may have false lows



Red Blood Cell



Diabetes Education
SERVICES

6. A1c and Estimated Avg Glucose (eAG)

A1c (%)	eAG
5	97
6	126
7	154
8	183
9	212
10	240
11	269
12	298

Order
teaching tool
kit free at
diabetes.org



$eAG = 28.7 \times A1c - 46.7 \sim 29 \text{ pts per } 1\%$

Translating the A1c Assay Into Estimated Average Glucose Values – ADAG Study
Diabetes Care: 31, #8, August 2008



Diabetes Education
SERVICES

6. Glucose Goals 2015 Individualize Targets – ADA



- ▶ Pre-Prandial BG 80- 130
 - ▶ rather than 70–130 mg/dL,
to better reflect new data comparing actual average glucose levels with A1C targets.
- ▶ 1-2 hr post prandial < than 180
*for nonpregnant adults



Diabetes Education
SERVICES

7. Approaches to Glycemic Management

► Join our Meds for Type 2 (Part 1)

► Jan 19 – in Level 1 Series

► Join our Meds Management for Type 2 (Part 2)

► Webcast on Feb 4 – in Level 2 Series

► Join Insulin Pattern Management Gone Crazy (Part 2)

► Webcast on Feb 19 – in Level 2 Series



Diabetes Education
SERVICES

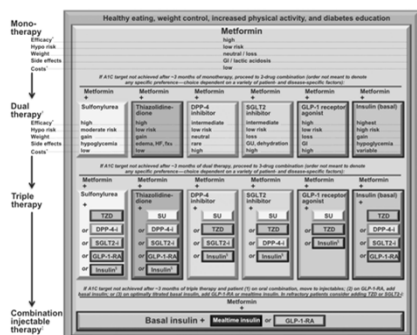
7. Steps to manage hyperglycemia in Type 2:

- **Start with lifestyle** - healthy eating, weight management, increased physical activity and diabetes education.
- **Add metformin** - When lifestyle alone is not achieving A1c goal. Metformin should be added at, or soon after diagnosis (unless contraindicated).
- **Using GFR as safety indicator for metformin.** The ADA Stds 2015 suggests GFR may be a more appropriate measure than creatinine to screen for risk of lactic acidosis. **They suggest if GFR <45, max dose is 1000mg a day. If GFR <30, stop metformin.**
- Metformin has a long standing evidence base for efficacy and safety, is cheap and may reduce CV risk.
- **If A1c target is not achieved after 3 months**, consider adding one of 6 treatment options or basal insulin.
- **Consider starting dual therapy if A1c ≥ 9%.** Also consider starting insulin therapy since it is most effective at getting A1c to goal.
- **A1c still above target? Consider:**
 - Basal bolus therapy or add a GLP-1 Agonist.
 - Twice daily premixed biphasic insulin (70/30)



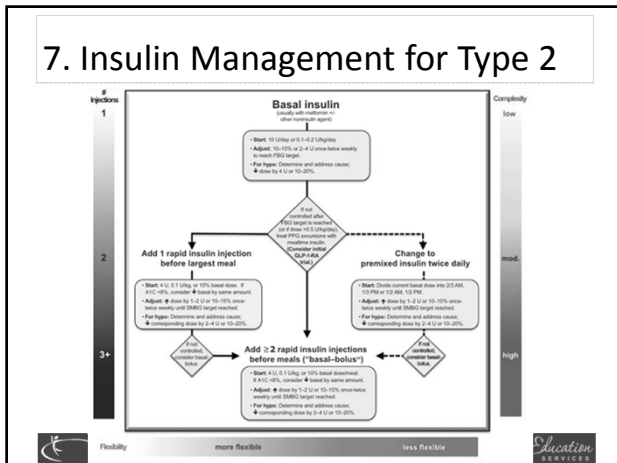
Diabetes Education
SERVICES

7. Hyperglycemia Algorithm – Type 2



Diabetes Education
SERVICES

7. Insulin Management for Type 2



8. Cardiovascular Disease and Risk Management

- ▶ Cardiovascular disease is the leading cause of mortality and morbidity in diabetes
- ▶ Largest contributor to direct and indirect costs
- ▶ Controlling cardiovascular risk improves outcomes
- ▶ Large benefits are seen when multiple risk factors are addressed globally



Diabetes Education SERVICES

8. BP Goal 2015

BP < 140 / 90



- ▶ Some pts may benefit from B/P 130/80 (younger and achieved with undue tx burden)
- ▶ Studies indicate that the previous B/P target of 140/80 didn't improve outcomes enough to balance the risk of side effects such as orthostatic hypotension and polypharmacy.



Diabetes Education SERVICES

8. Hypertension Guidelines 2015

Screening – Check BP at each visit.

If either

- systolic 140 or > diastolic 90 or > repeat on separate day.

Hypertension = Repeat systolic or diastolic above or equal to these levels

When taking B/P

- Pt sit still for 5 min's
- Feet on floor,
- Arm supported at heart level
- Right size cuff



Diabetes Education Services

8. BP Treatment

ADA 2015 Standards

- ▶ Pts with B/P > 120/80
 - ▶ encourage lifestyle changes to reduce B/P
- ▶ B/P > 140/90
 - ▶ Lifestyle plus prompt initiation of B/P meds
- ▶ Lifestyle =
 - ▶ Weight loss
 - ▶ DASH Style diet (fresh fruit, veggies, whole grains, reducing sodium and increasing potassium intake)
 - ▶ Moderation of alcohol intake
 - ▶ Increased physical activity



Diabetes Education Services

8. Blood Pressure Treatment

- ▶ First Line B/P Drugs
 - ▶ ACE Inhibitors or
 - ▶ Angiotensin receptor blocker (ARBs) (type 2)
 - ▶ If one class is not tolerated, the other should be tried
- ▶ Multiple Drug Therapy often required
 - ▶ Including an ACE Inhibitor / ARB at max dose, plus a thiazide diuretic



Diabetes Education Services

8. Hyperlipidemia Update 2015

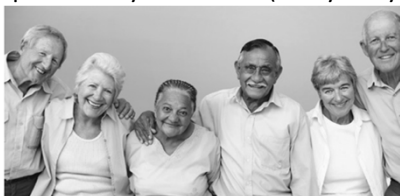
- ▶ **Statin treatment and lipid monitoring** were revised to reflect the 2013 findings of American College of Cardiology/ American Heart Association.
- ▶ **Statin therapy initiation** is no longer based on the LDL level.
 - ▶ Starting and dosing stratification is driven by risk status.



Diabetes Education
SERVICES

8. Dyslipidemia Screening - Adults

- ▶ Screening lipid profile is recommended at time of diagnosis
- ▶ And/or at 40 years
- ▶ And periodically thereafter (every 1-2 years)



Diabetes Education
SERVICES

8. Dyslipidemia Management

- ▶ **Start with lifestyle**
 - ▶ Reduce trans, saturated fat, cholesterol
 - ▶ Increase intake of omega-3 fatty acids, viscous fiber, and plant stanols/sterols
 - ▶ Contained in grains, vegetables, fruits, legumes, nuts, and seeds. Also added to margarine, OJ and other food products
 - ▶ Lose weight (if indicated)
 - ▶ Get Active



Diabetes Education
SERVICES

8. Dyslipidemia Management

- ▶ Intensify lifestyle therapy and optimize glucose control for patients with:
 - ▶ Triglycerides ≥ 150 and/or
 - ▶ HDL ≤ 40 (men) ≤ 50 (women)



Diabetes Education
SERVICES

2013 Prevention Guidelines Tools

CV RISK CALCULATOR

CVD Risk Factors

- Gender
- Age
- Race
- Total Chol/ HDL
- Systolic B/P
- Treated HTN?
- Diabetes
- Smoker

ASCVD Risk Calculator on AHA website

Figure 1. Major recommendations for statin therapy for ASCVD prevention

Diabetes Education
SERVICES

8. ADA Guidelines 2015

Table 8.1—Recommendations for statin treatment in people with diabetes

Age	Risk factors	Recommended statin dose*	Monitoring with lipid panel
<40 years	None CVD risk factor(s)** Overt CVD***	None Moderate or high High	Annually or as needed to monitor for adherence
40–75 years	None CVD risk factors Overt CVD	Moderate High High	As needed to monitor adherence
>75 years	None CVD risk factors Overt CVD	Moderate Moderate or high High	As needed to monitor adherence

*In addition to lifestyle therapy.

**CVD risk factors include LDL cholesterol ≥ 100 mg/dL (2.6 mmol/L), high blood pressure, smoking, and overweight and obesity.

***Overt CVD includes those with previous cardiovascular events or acute coronary syndromes.



Diabetes Education
SERVICES

8. Statin Therapy

- ▶ High intensity statins (lowers LDL 50%):
 - ▶ Lipitor (atorvastatin) 40-80mg
 - ▶ Crestor (rosuvastatin) 20-40mg
- ▶ Moderate intensity (lowers LDL 30-50%)
 - ▶ Lipitor (atorvastatin) 10-20mg
 - ▶ Crestor (rosuvastatin) 5-10mg
- ▶ Low Intensity
 - ▶ Pravachol (pravastatin) 10 – 20mg
 - ▶ Mevacor (Lovastatin) 20mg



Diabetes Education
SERVICES

2013 ACC/AHA Cholesterol Guidelines

Table 5. High-, Moderate- and Low-Intensity Statin Therapy (Used in the RCTs reviewed by the Expert Panel)*

High-Intensity Statin Therapy	Moderate-Intensity Statin Therapy	Low-Intensity Statin Therapy
Daily dose lowers LDL-C on average, by approximately ≥50%	Daily dose lowers LDL-C on average, by approximately 30% to <50%	Daily dose lowers LDL-C on average, by <30%
Atorvastatin (40)-80 mg Rosuvastatin 20 (40) mg	Atorvastatin 10 (20) mg Rosuvastatin (5) 10 mg Simvastatin 20-40 mg† Pravastatin 40 (80) mg Lovastatin 40 mg Fluvastatin XL 80 mg Fluvastatin 40 mg bid Pitavastatin 2-4 mg	Simvastatin 10 mg Pravastatin 10-20 mg Lovastatin 20 mg Fluvastatin 20-40 mg Pitavastatin 1 mg



Diabetes Education
SERVICES

8. Lipid Management

ADA Clinical Practice Recommendations

- ▶ **Add Statins for pts (regardless of LDL)**
 - ▶ With CVD
 - ▶ Without CVD who are 40+ with CVD risk factor

▶ Treatment Recommendations

- ▶ Lifestyle interventions
 - ▶ reduce saturated & trans fat, cholesterol,
 - ▶ More viscous fiber, n-3 fatty acids, plant sterols/sterols
 - ▶ wt loss, exercise, stop smoking,



Diabetes Education
SERVICES



Aspirin Therapy (75-162/day)

- ▶ Aspirin not recommended for diabetes if low CVD risk and under age of 50 women, 60 men
- ▶ Use for men >50 yrs, or women >60 yrs who smoke or have CV risk factor – primary prev)
- ▶ Use aspirin therapy for diabetes pts with history of CV disease (secondary prev)
- ▶ Combo therapy of aspirin + clopidogrel is reasonable for a year after MI
- ▶ Do not use in pts w/ allergy use Plavix, (clopidogrel)



Diabetes Education
SERVICES

8. Coronary Heart Disease

- ▶ In patients with known CVD, use:
 - ▶ Aspirin
 - ▶ Statin
 - ▶ B/P Med
 - ▶ Consider using ACE Inhibitor to reduce risk of CV event
 - ▶ In pts with prior MI, Beta Blockers should be continued at least 2 years after the event
 - ▶ Don't use Actos or Avandia in pts with CHF
 - ▶ In pts with stable CHF, Metformin can be used in renal function normal and stable



Diabetes Education
SERVICES

A 78 yr old man, smokes ppd

- ▶ A1c was 8.1% (down from 10.4%)
- ▶ B/P 136/76 AM BG 100, 2 hr pp 190
- ▶ Chol – TG 54, HDL 46, LDL 98
- ▶ Meds:

- ▶ Insulin – 16 units Lantus at HS
- ▶ Benazepril 20 mg
- ▶ Metoprolol 50mg
- ▶ Warfarin 5mg
- ▶ Actos 15 mg



What class of meds is this patient on?
Any special instructions?
Any med missing?



Diabetes Education
SERVICES

Mr. Jones - What are Your Recommendations for Self-Care?

Patient Profile

62 yr old with newly dx type 2.

History of previous MI.

Meds: Lasix, synthroid

Labs:

- ▶ A1c 9.3%
- ▶ HDL 37 mg/dl
- ▶ LDL 156 mg/dl
- ▶ Triglyceride 260mg/dl
- ▶ Proteinuria - neg
- ▶ B/P 142/92

Self-Care Skills

- ▶ Walks dog around block 3 x's a week
- ▶ Bowls every Friday
- ▶ Widowed, so usually eats out



Diabetes Education
SERVICES

ABCs of Diabetes

▶ A1c less than 7% (avg 3 month BG)

- ▶ Pre-meal BG 70-130
- ▶ Post meal BG <180

▶ Blood Pressure < 140/80

▶ Cholesterol

- ▶ Eval if statin therapy indicated



Diabetes Education
SERVICES

Diabetes Care Guidelines- ADA

Test / Exam	Frequency
▶ A1c	At least twice a year
▶ B/P	Each diabetes visit
▶ Cholesterol (LDL, HDL, Tri)	Yearly (less if normal)
▶ Weight	each diabetes visit
▶ Microalbumin/GFR/Creat	Yearly
▶ Eye exam	Yearly
▶ Dental Care	At least twice a year
▶ Comprehensive Foot Exam	Yearly (more if high risk)
▶ Physical Activity Plan	As needed to meet goals
▶ Preconception counseling	As needed



Diabetes Education
SERVICES

9. Microvascular Complications

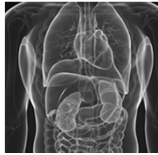
- ▶ **"Every time you see your doctor, take off your shoes and socks and show your feet!"**
- ▶ For those at high risk for foot complications
- ▶ All patients with loss of protective sensation, foot deformities, or a history of foot ulcers



Diabetes Education
SERVICES

9. Microvascular Complications

- ▶ **Kidney Disease**
 - ▶ Optimize glucose and B/P Control to protect kidneys
 - ▶ Screen for Albumin-Creat ratio and GFR
 - ▶ Type 2 yearly
 - ▶ Type 1 after had diabetes for 5 years
 - ▶ Treat hypertension with ACE or ARB and intensify as needed
 - ▶ Consider referral to specialist when management is difficult and kidney disease is advanced
 - ▶ Not recommended to limit dietary protein intake below 0.8 g/kg/day (doesn't improve outcomes)



Diabetes Education
SERVICES

9. Microvascular Complications

- ▶ **Eye Disease**
 - ▶ Optimize glucose and B/P Control to protect eyes
 - ▶ Screen with initial dilated and comprehensive eye exam by ophthalmologist or optometrist
 - ▶ Type 2 at diagnosis, then every one to 2 years
 - ▶ Type 1 within 5 years of dx, then every 1-2 years
 - ▶ Can use high quality fundus photography as screening tool- Initial exam should be done in person
 - ▶ Promptly refer pts with macular edema, severe non-proliferative disease trained specialist
 - ▶ Treatment includes laser therapy (retinopathy) and Antivascular and Endothelial Growth Factor for Macular Edema

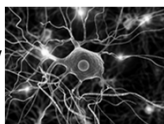


Diabetes Education
SERVICES

9. Microvascular Complications

► Nerve Disease

- Tight glycemic control is the only strategy shown to prevent or delay the development and progression of neuropathy.
- Screen all patients for nerve disease using simple tests, such as a monofilament
 - Type 2 at diagnosis, then annually
 - Type 1 diabetes 5 years, then annually
- Assess and treat patients to reduce pain and symptoms to improve quality of life.



Diabetes Education
SERVICES

10. Older Adults

- If functional and cognitively intact with significant life expectancy, use same goals as younger adults
- Glycemic goals may need to be relaxed with focus on quality of life
- Address Cardiovascular Risk factors
- Focus screening for complications on those that would lead for functional impairment
- Over age 65, high risk for depression



Diabetes Education
SERVICES

11. Children and Adolescents

► See Level 2 Course

- Kids and Diabetes – will be re-recording in February



Diabetes Education
SERVICES

12. Gestational DM ~ 7% of all Pregnancies

- ▶ GDM prevalence increased by
 - ▶ ~10–100% during the past 20 yrs
- ▶ Native Americans, Asians, Hispanics, African-American women at highest risk
- ▶ Immediately after pregnancy, 5% to 10% of GDM diagnosed with type 2 diabetes
- ▶ Within 5 years, 50% chance of developing DM in next 5 years.



Diabetes Education
SERVICES

12. Management of Diabetes in Pregnancy

- ▶ Provide preconception counseling, focus on importance of glycemic control, A1c<7%, to prevent anomalies
- ▶ Avoid teratogenic meds (ACE Inhibitors, Statins) in sexually active women not using reliable contraception
- ▶ Manage GDM with diet and exercise first, add meds if needed.
- ▶ Women with pregestational diabetes need baseline eye exam in first trimester, monitor every trimester
- ▶ A1c target during pregnancy if <6%, if can be achieved without hypo
- ▶ Meds used in pregnancy include insulin, metformin and glyburide, still need long term safety data



Diabetes Education
SERVICES

12. Screen Pregnant Women Before 13 weeks

- ▶ Screen for undiagnosed Type 2 at the first prenatal visit using standard risk factors.
- ▶ Women found to have diabetes at their initial prenatal visit treated as "Diabetes in Pregnancy"
- ▶ If normal, recheck at 24-28 weeks



Diabetes Education
SERVICES

12. GDM Criteria - 2 Options

"1 Step" – 75 gm OGTT

- ▶ 24-28 weeks
- ▶ OGTT in am after overnight fast of 8 or > hrs
- ▶ **GDM Diagnosis if ANY** of the following values met or exceeded:

▶ FBG 1 HR 2HR
 ▶ ≥92 or ≥180 or ≥153

*Based on Hyperglycemia and Adverse
Pregnancy Outcomes Study - IADPSG*



Diabetes Education
SERVICES

12. GDM Criteria – Option 2

"NIH 2 step"

- ▶ Step 1
 - ▶ 50 gm Oral Glucose Tolerance Test (non-fasting)
 - ▶ If BG 140* at 1 hour proceed to Step 2
- ▶ Step 2 – 100 gm Oral Glucose Tolerance (fasting)
 - ▶ **GDM Diagnosis if 2** values are met or exceeded

	Carpenter/Coustan	or	NDDG
• Fasting	95 mg/dL (5.3 mmol/L)		105 mg/dL (5.8 mmol/L)
• 1 h	180 mg/dL (10.0 mmol/L)		190 mg/dL (10.6 mmol/L)
• 2 h	155 mg/dL (8.6 mmol/L)		165 mg/dL (9.2 mmol/L)
• 3 h	140 mg/dL (7.8 mmol/L)		145 mg/dL (8.0 mmol/L)

NDDG, National Diabetes Data Group. *The American College of Obstetricians and Gynecologists (ACOG) recommends a lower threshold of 135 mg/dL (7.5 mmol/L) in high-risk ethnic minorities with higher prevalence of GDM; some experts also recommend 130 mg/dL (7.2 mmol/L).



Postpartum after GDM

- ▶ 50% risk of getting diabetes in 5 years
- ▶ Screen at 6-12 wks post partum
- ▶ Repeat at 3 yr intervals or signs of DM
 - ▶ Encourage Breast Feeding
 - ▶ Encourage weight control
 - ▶ Encourage exercise
 - ▶ Make sure connected with health care
 - ▶ Lipid profile/ follow BP
 - ▶ Preconception counseling



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13. Diabetes Care in Hospital, Nursing Home and Skilled Nursing Facility

- ▶ Start discharge planning on admission
- ▶ Avoid sole use of sliding scale insulin during hospital stay
- ▶ Clearly identify type of diabetes on admission
- ▶ Critically ill patient goals:
 - ▶ Start insulin if BG >180
 - ▶ Goal BG 140- 180 (some pts may benefit from 110-140)
- ▶ Non Critically Ill patient goals
 - ▶ Premeal < 140
 - ▶ Post meal <180
- ▶ Basal bolus preferred treatment
- ▶ Have hypoglycemia protocol
- ▶ Get A1c on all patient with DM/hyperglycemia



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14. Diabetes Advocacy

- ▶ People living with diabetes should not face discrimination
- ▶ We need to all be a part of advocating for the best care and the rights of people living with diabetes.



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Thank You



- ▶ Please email us with any questions.
- ▶ www.diabetesed.net



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