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EPIC DIABETES CONFERENCE

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Empowering Patients FOR Individualized Care

Getting Older with Diabetes

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Outline
- Diagnosing diabetes
- Glucose targets and hypoglycemia
- Cardiovascular risk reduction
- Comorbidities
- Driving motor vehicles
- Costs of diabetes medications

❖ *More than 25% of the US population $\geq$ 65 years has diabetes.*

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Slide 1

Diagnosing Diabetes
- Fasting Glucose > 125 mg/dl
- Two Hour Post-Meal Glucose $\geq$ 200 mg/dl
- A1C $\geq$ 6.5%

Diagnosing Prediabetes
- Fasting Glucose 100-125 mg/dl
- Two Hour Post-Meal Glucose 140-200 mg/dl
- A1C 5.7% - 6.4%

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Slide 2

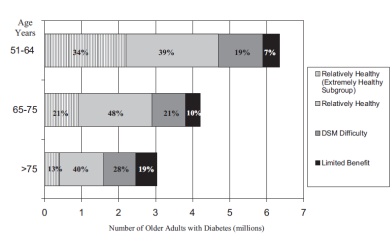### Glucose Targets

Groups	A1c target	Fasting blood sugars
Healthy adults, long life expectancy	<7.5%	90-130
Moderate comorbidities and/or life expectancy < 10 years	< 8%	90-150
Multiple morbidities, life expectancy < 5 years	<8.5%	100-180

Kirkman. Diabetes Care 2012.

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Slide 3

Glucose Targets

Age Years

51-64: 34% | 39% | 19% | 7%
65-75: 21% | 48% | 21% | 10%
>75: 13% | 40% | 28% | 19%

Legend:
- Relatively Healthy (Extremely Healthy Subgroup)
- Relatively Healthy
- DSM Difficulty
- Limited Benefit

Number of Older Adults with Diabetes (millions): 0 1 2 3 4 5 6 7

Blaum. Medical Care. 2010.

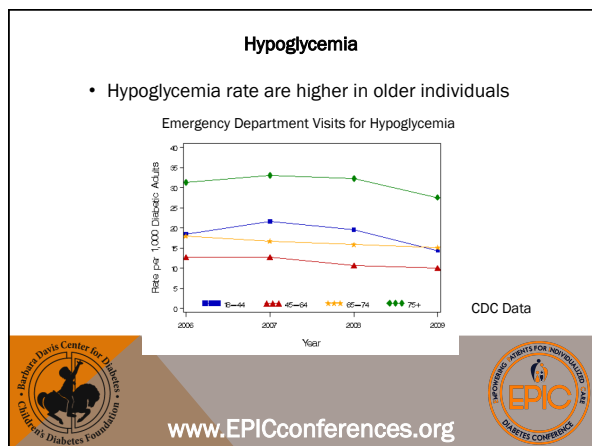www.EPICconferences.org

Slide 4

Glucose Targets

- A1c may not be accurate in conditions that are frequently seen in older adults

Anemia	Acute illness
Chronic kidney disease	Hospitalizations
Recent transfusions	Chronic liver disease

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Hypoglycemia

- Hypoglycemia rate are higher in older individuals

Emergency Department Visits for Hypoglycemia

Rate per 1,000 Diabetic Adults

15—44 45—64 65—74 75+

CDC Data

Year

Hypoglycemia

- Older adults are more vulnerable to the effects of hypoglycemia.
    - There may be delayed recognition of hypoglycemia.
    - Hypoglycemic episodes may increase the risk of cardiovascular events and cardiac autonomic dysfunction, dementia, and falls.

Hypoglycemia Risk Factors

Medication	Missed meals
Hypoglycemia unawareness	Acute illness
Food insecurity	Prior hypoglycemia
A1c	Kidney disease

Cardiovascular Risk Reduction

- Risk of cardiovascular disease increases with age.

- Smoking cessation
- Treatment of hypertension
    - Some dispute about specific goals. Generally <140/90 for younger, healthy adults, and <150/90 for older, frail adults
- Treatment of dyslipidemia
    - Statins are recommended for secondary prevention, and for primary prevention in individuals with diabetes who are 40-75 years old

Cardiovascular Risk Reduction

- Aspirin
  - For secondary prevention, and consider for primary prevention for those with 10-year CV risk > 10% (most people with diabetes ≥ 50 years old with at least one additional major risk factor).
- Exercise
  - Exercise helps maintain physical function, reduce cardiac risk, and improve insulin sensitivity. It also improves body composition, reduces falls and depression, increases strength and balance, enhances quality of life, and decreasing mortality.

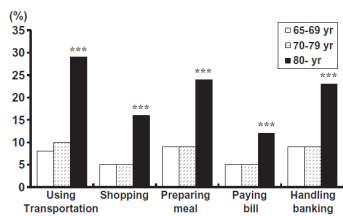www.EPICconferences.org

Comorbidities

- Older adults with diabetes are at higher risk for polypharmacy, functional disabilities, and common geriatric syndromes such as:
  - Cognitive impairment
  - Depression
  - Falls
  - Urinary incontinence

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Comorbidities

Araki. Geriatr Gerontol Int 2009.

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Driving Motor Vehicles

- People with diabetes should check their blood glucose level before they start their car to drive and should treat their blood glucose level if it is low or very high before they drive.

- People with diabetes how drive commercial vehicles must have written approval from their doctor sent to the DOT every 3-6 months.

- People with diabetes who have a severe hypoglycemic episode that results in a seizure cannot drive any vehicle until they have at least 6 months without a repeat episode.

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Cost of Diabetes Medications

- Diabetes Medications are Expensive

  - Oldest Medications Average: $4 - $100 per month
  - Newer Medications Average: $350 - $1,000 per month

- Weight Loss of 10-15 lb can often result in being able to stop at least one diabetes medication.

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