

***Gearitric Diabetes Program
at the
Joslin Diabetes Center***

Medha Munshi

Joslin Diabetes Center

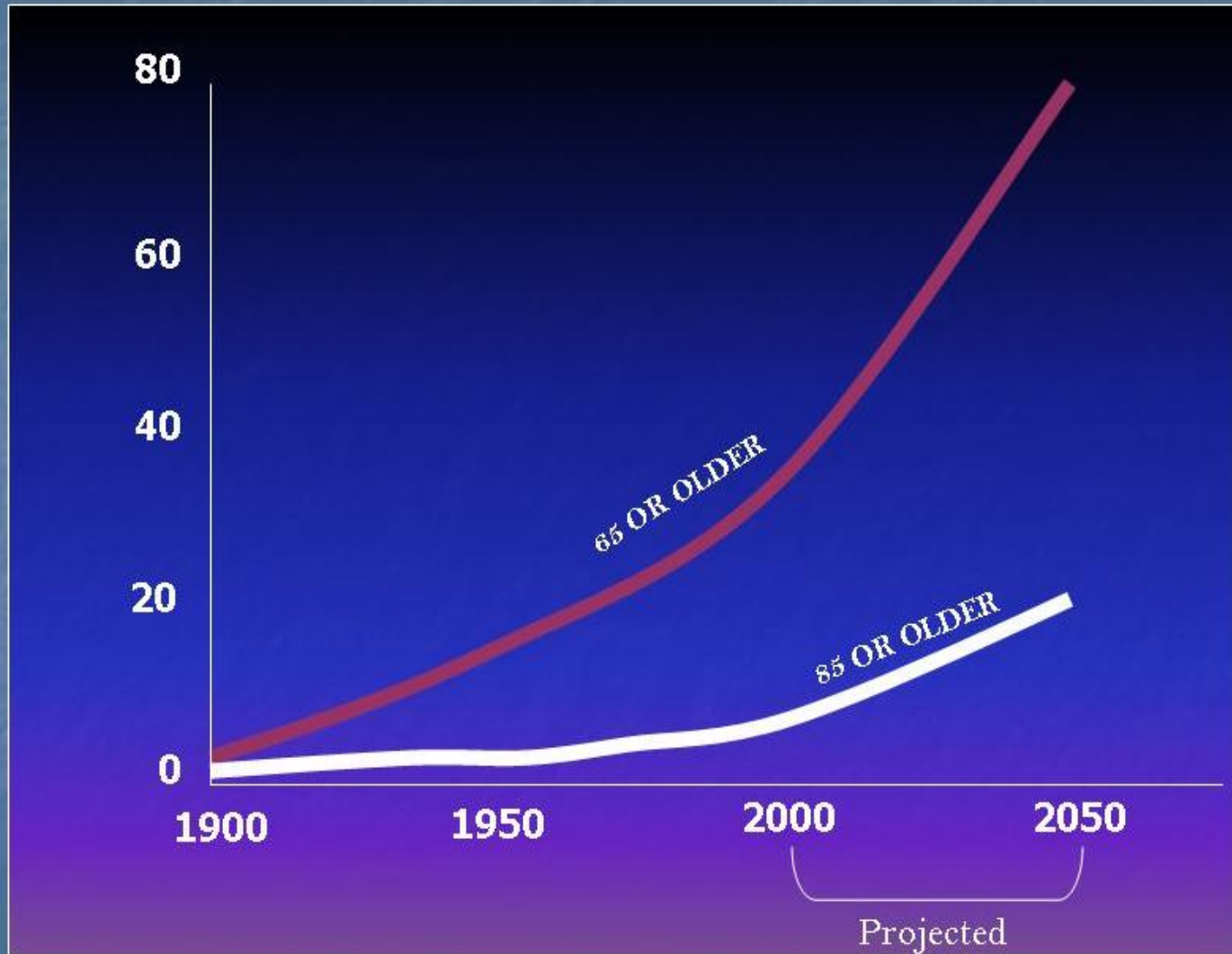
Beth Israel Deaconess Medical Center

Harvard Medical School

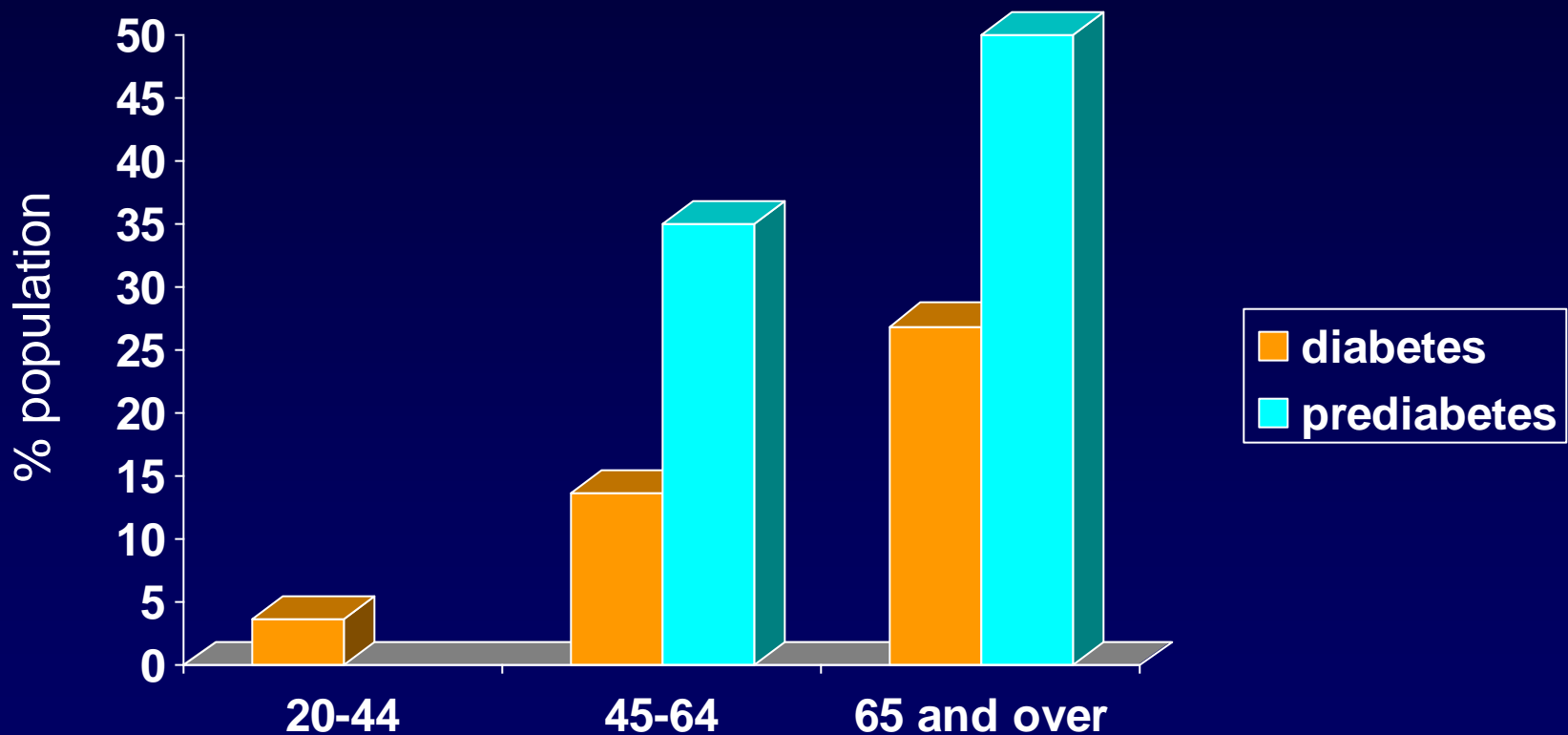
Disclosure

- Disclosed no conflict of interest.

Total number of persons ≥ 65 years 1900-2050 in millions



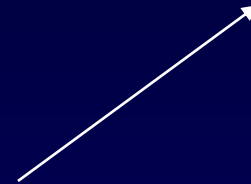
Diagnosed and Undiagnosed Diabetes



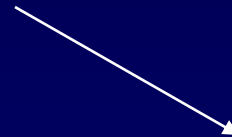
Young adults vs Older adults with Diabetes

- Heterogeneous population
 - Clinically
 - Functionally
 - Socioeconomically
- Multiple co-morbidities
- Goals of treatment

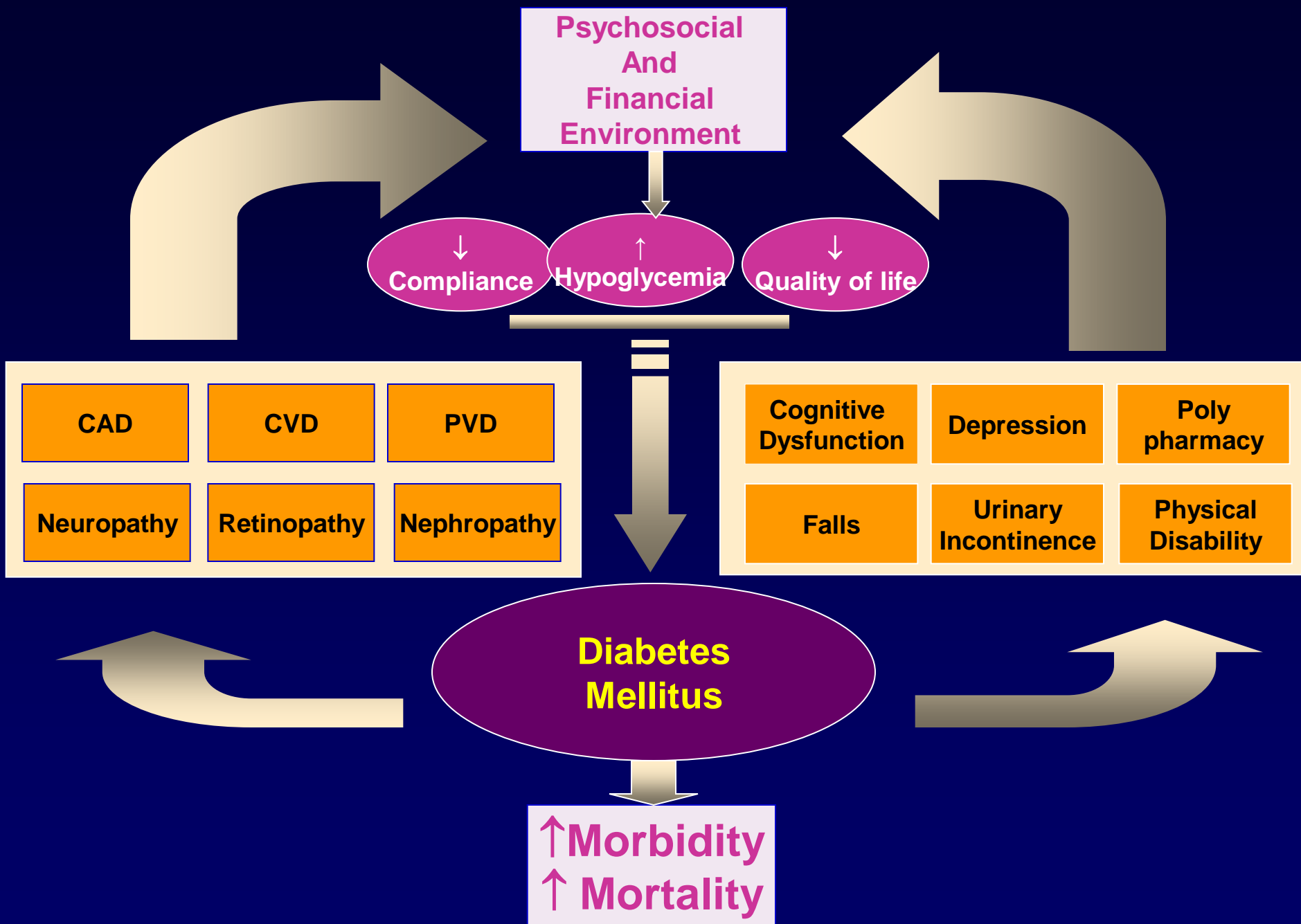
Medication
management



Education
strategies



Complex Interactions in Older Adults with Diabetes



Management of Diabetes in Older Adults

- Screening for barriers
 - Clinical / functional / psychosocial
- Management of hyperglycemia
 - Medications
 - Diet
 - Exercise/Physical activity
- Management of risk factors
 - BP control <130/80 mm Hg
 - LDL cholesterol <100 mg/dl
 - Cessation of cigarette smoking
 - Low dose aspirin therapy
 - Yearly screening for microalbuminuria (ACE inhibitors), retinopathy, foot examination

Geriatric Diabetes Clinic

Goals:

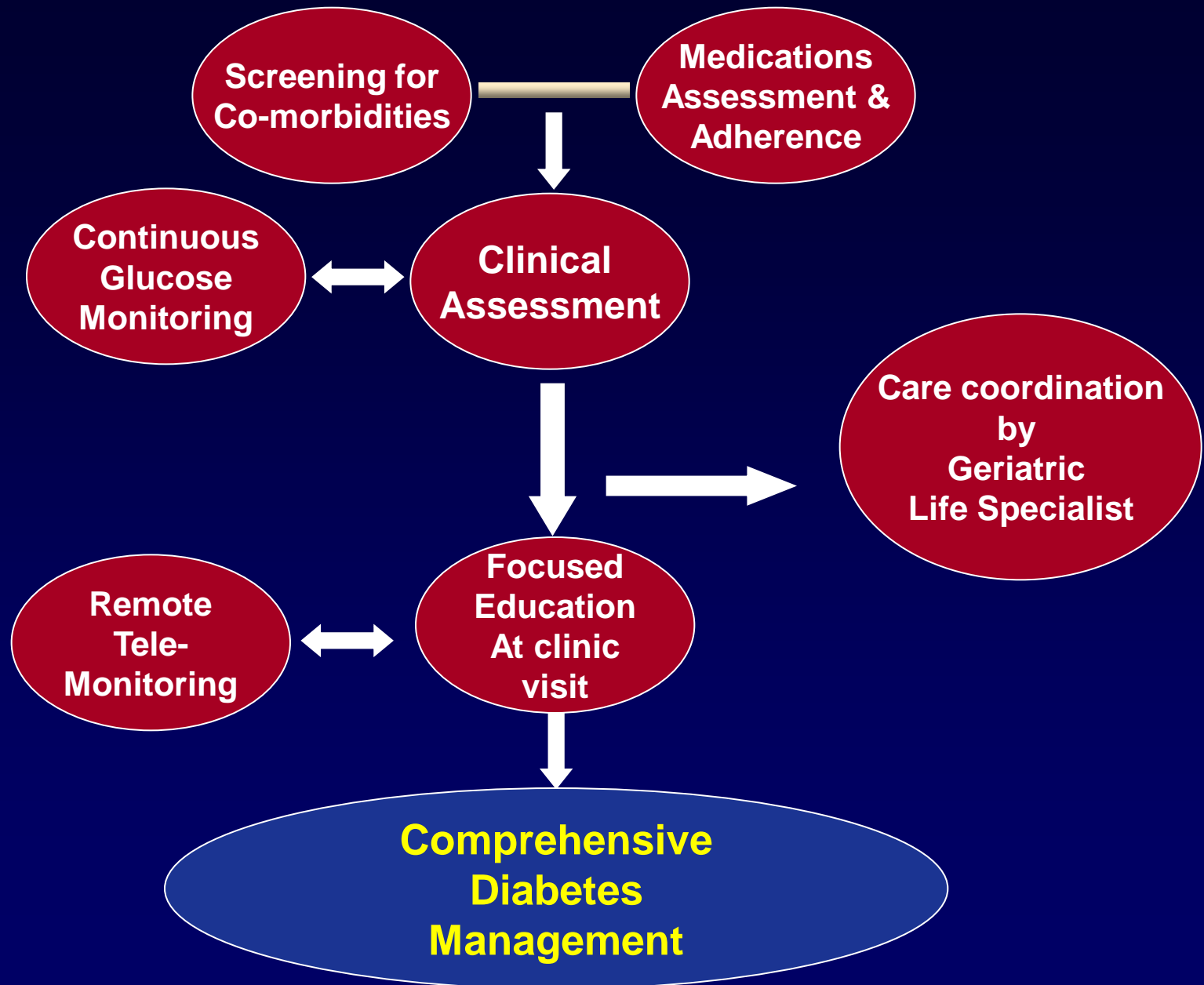
- Identify barriers
- Help patients to overcome barriers
 - Depression, deconditioning, social isolation
- Modify management plans
 - Cognitive dysfunction, physical disabilities

Improve overall health goals and quality of life
along with glycemic goals.

Geriatric Diabetes Clinic

- Health Literacy
 - 2 question screening
- Cognitive assessment
 - Modified clock-drawing test esp. for executive dysfunction
- Depression
 - 2 question tool
- Functional assessment - questionnaire
- Social support assessment - questionnaire
- Medication adherence and Polypharmacy assessment
- Nutrition assessment – 6 questions tool
- Exercise prescription – pt tolerance and preference

Joslin Geriatric Diabetes Clinical Care Model



Practice-related Outcomes

Patient-based

Assess barriers

Cognitive dysfunction:	34%
Depressive symptoms:	33%
Functional difficulties:	62%
Inadequate social support:	40%

Educate at each visit

To patient and/or caregivers:	90%
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Caregiver support

Education to caregivers:	40%
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Phone availability between visits

Phone call follow-up:	60%
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Practice-related outcomes

Goal-setting

Establish individualized glycemic goals

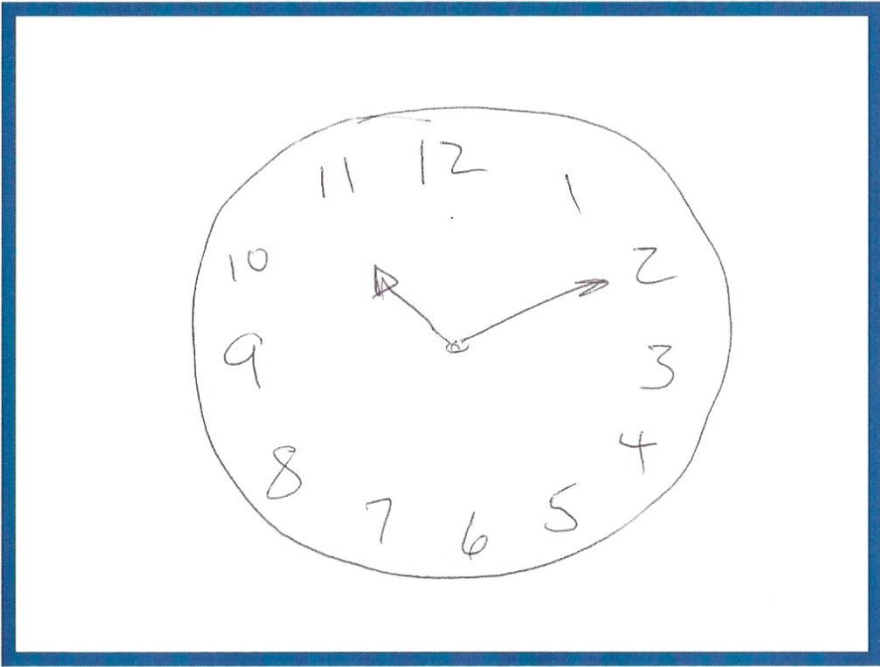
Improve hyperglycemia: **32%**

Decrease hypoglycemia: **19%**

Reduce glucose excursions: **11%**

Medication management and compliance: **13%**

Continue maintaining current glycemic control: **25%**





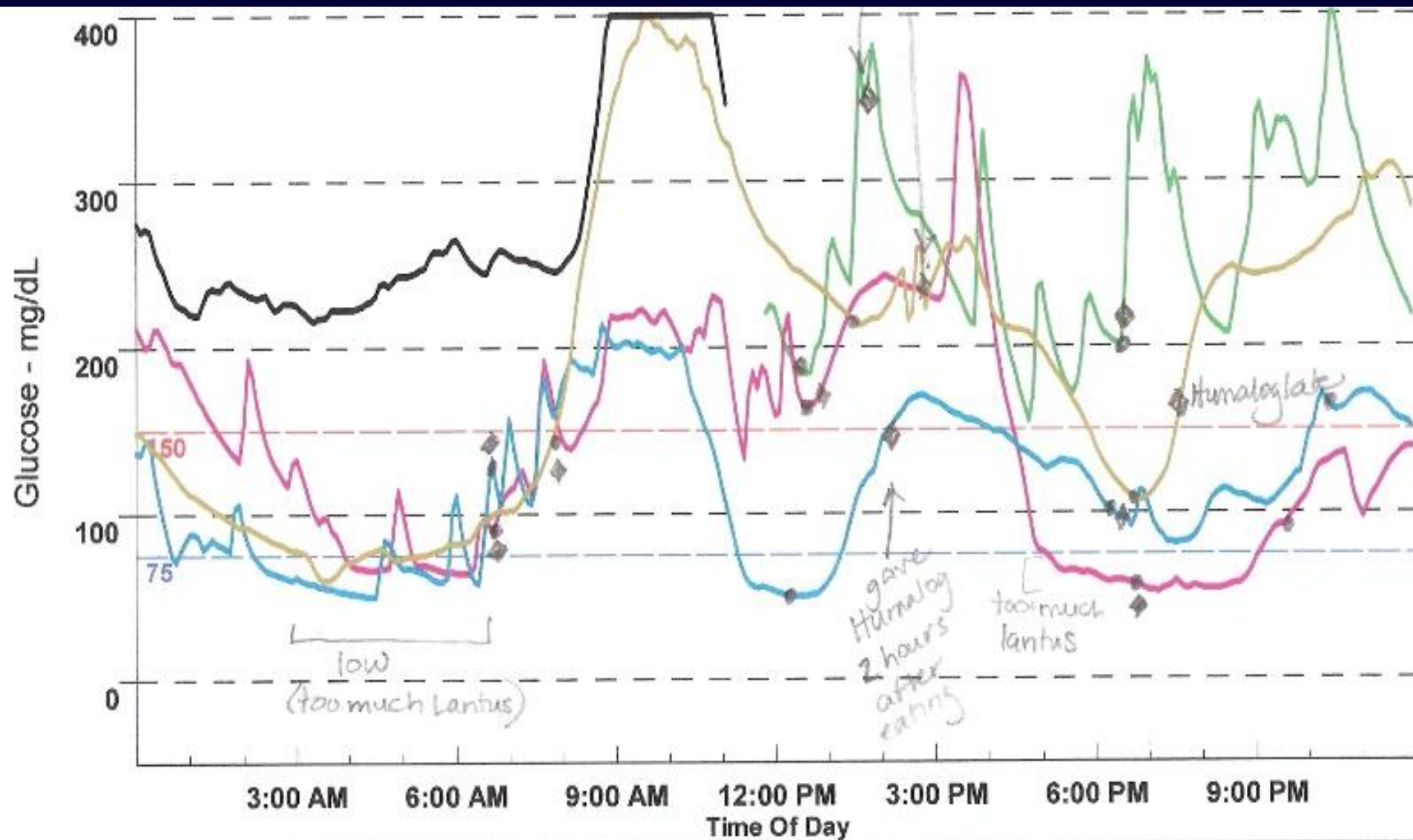
MMSE: 28/30
GDS: 1/15

PET IN A BOX

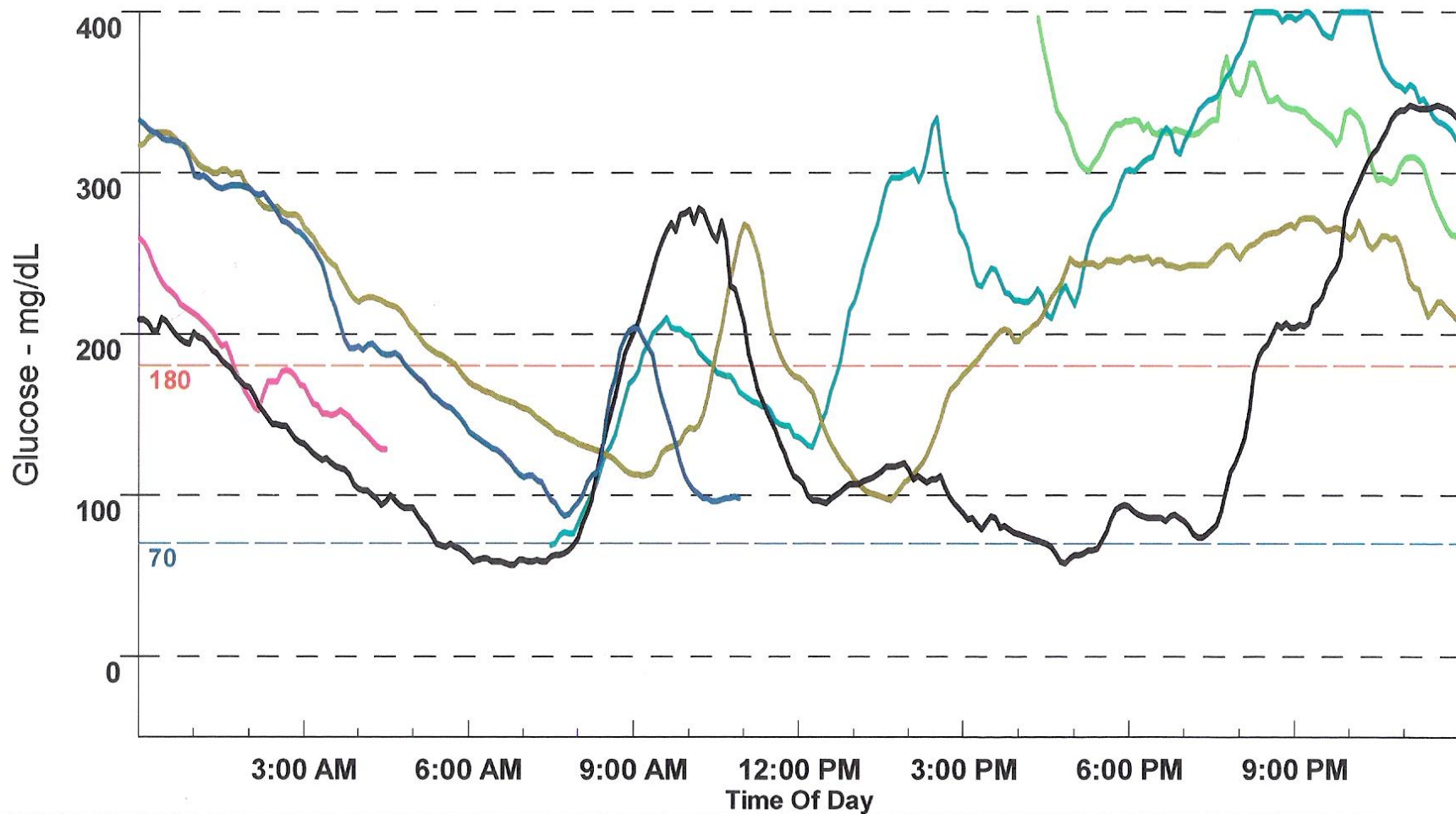
DRAW A CLOCK

10-12

Mr. RD: A1C:6.5%



Mrs. JB: A1C:10 %



Legend

Sunday

Tuesday

Thursday

Saturday

Monday

Wednesday

Friday



Practice-related outcomes

Practice-based

Offer availability of educator, nutritionist, pharmacist

- At each clinic visit

Dissemination of tools and knowledge

- CME presentations (endocrinology/geriatrics)
- Education for PCP through Joslin Strategic Initiatives (outpatient and nursing home)
- Clinical observerships (local/national/international)
- Research/publications

Research / Publications

1. Cognitive dysfunction is associated with poor diabetes control in older adults.
Munshi et al; Diabetes Care. 2006;29(8):1794-9.
2. Use of serum c-peptide level to simplify diabetes treatment regimens in older adults.
Munshi et al: Am J Med. 2009 Apr;122(4):395-7
3. Frequent hypoglycemia among elderly with poor glycemic control.
Munshi et al: Arch Intern Med. 2011;171(4):362-364

Barriers to Best Practice

- Time restraints
 - Short tools – surveys and questionnaire that can be filled by patient/caregivers
 - Phone contact between the visits
- Lack of reimbursement
- Lack of evidence-based recommendations

Diabetes Management Goals in older adults



Glycemic Goal

**Hypoglycemia
Social support and
Living situation
Financial issues
Overall Health Goal
Life expectancy
Physical abilities**

Summary

“Winning the battle as well as the war”

‘Improving glycemic control while maintaining quality of life’

Ideal geriatric diabetes clinic philosophy

- Older patients with diabetes are a heterogeneous group – distinctly different from younger adults
- Older adults have multiple co existing conditions and it is important to set and adjust goals of treatment as needed
- Phone contact between clinic visits is essential to help adjust glucose fluctuations that occurs in health and disease.



