

# Welcome to the Webinar

## Caring for Older Adults with Diabetes in Long Term Care

We will begin at 10:30

Use the Chat Box to tell us your name,  
organization and position.

May 28, 2020



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# Caring for Older Adults with Diabetes in Long-Term Care

## COVID-19 Workshop Series

May 28, 2020



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# The IPRO QIN-QIO Who We Are



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## The IPRO QIN-QIO

- A federally funded Medicare Quality Innovation Network – Quality Improvement Organization
- 12 regional CMS QIN-QIOs nationally

### IPRO:

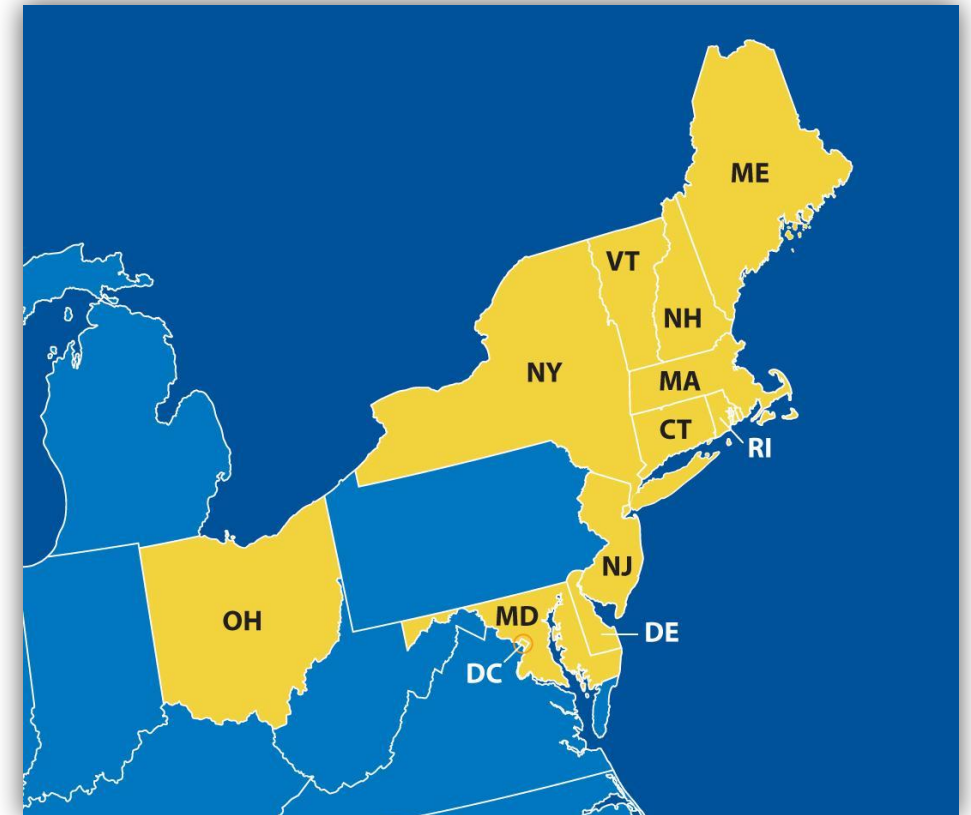
New York, New Jersey, Ohio

### Healthcentric Advisors:

Maine, New Hampshire, Vermont,  
Massachusetts, Connecticut, Rhode Island

### Qlarant:

Maryland, Delaware, District of Columbia



Working to ensure high-quality, safe healthcare for  
**20% of the nation's Medicare FFS beneficiaries**

## Quality Innovation Network – Quality Improvement Organizations (QIN-QIOs)

- Bring together healthcare providers, stakeholders, and Medicare beneficiaries to improve the quality of healthcare for targeted health conditions
- Work toward better care, healthier people & communities, and smarter spending
- Catalyze change through a data-driven approach to improving healthcare quality
- Collaborate with providers, practitioners and stakeholders at the community level to share knowledge, spread best practices and improve care coordination
- Promote a patient-centered model of care, in which healthcare services are tailored to meet the needs of patients

# Caring for Older Adults with Diabetes in Long-Term Care



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## Our Speakers



Dr. Sarah Sy is currently a Geriatric Diabetes Fellow at Beth Israel Deaconess Medical Center and Joslin Diabetes Center in Boston, Massachusetts.

She completed her training in Internal Medicine and Geriatric Medicine at the University of British Columbia, Canada.



Dr. Darren Triller is a clinical pharmacist with 30 years of experience in medication safety and quality improvement. He has led multiple state and national efforts relating to high-risk drugs and serves as IPRO's lead for the drug safety aim for the current QIN-QIO contract.



# Presentation Overview

## Objectives



- Recognize the challenges of diabetes management in LTC during the COVID-19 pandemic
- Appreciate the importance of individualized glycemic goals for the patients
- Implement management strategies for patients with Type 1 and Type 2 diabetes



# Challenges in Long-Term Care



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- Medically complex patients
- Frequent changes in health can impact glucose levels
- Erratic intake of food and drink
- Patients are dependent on LTC staff for diabetes self-care and activities of daily living
- Patients may have behaviors that make it more difficult for glucose monitoring and adherence to treatment
- LTC facility may not have diabetes specific protocols (e.g. for hypoglycemia or hyperglycemia)
- There may be inadequate diabetes education for staff

# Additional Challenges during COVID-19

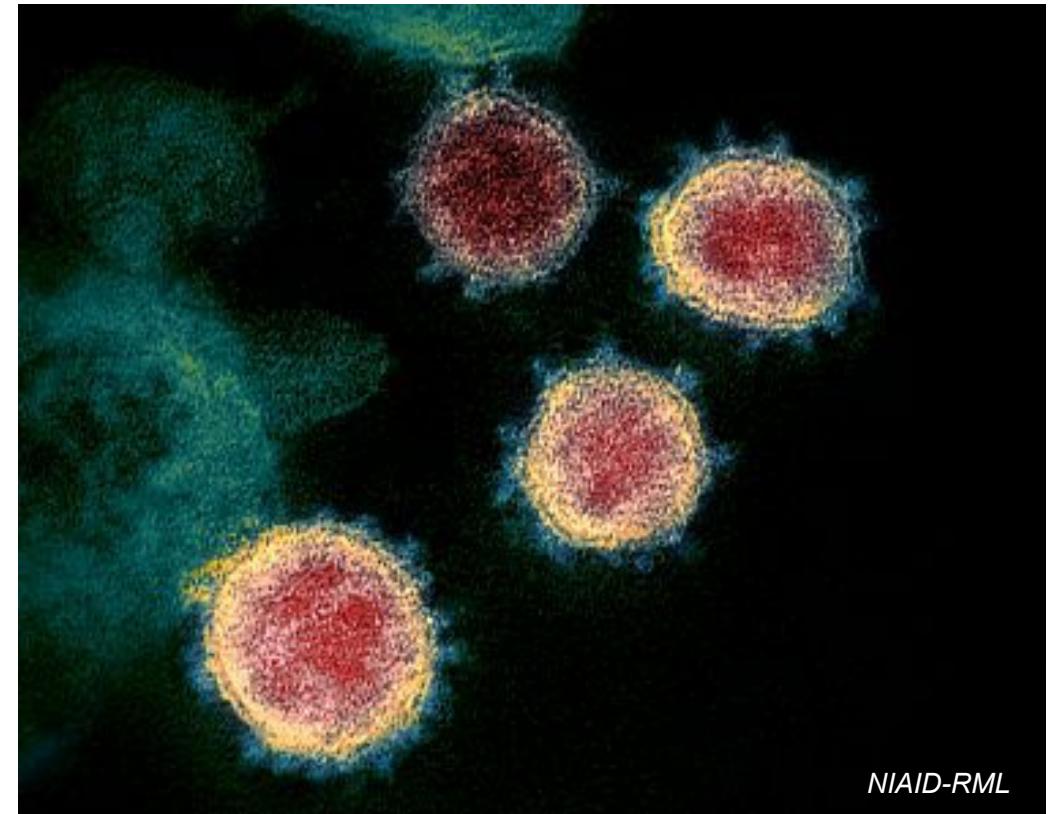


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- Highest risk patients for adverse outcomes
- Limited staff and resources
- Caring for patients with COVID-19
  - Exposure and spread
  - Transitions of care
- Increased psychological stress for patients and staff



NIAID-RML





# Older Adults with Diabetes and COVID-19



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## Many Unknowns!

- Type of diabetes
- Duration
- Diabetes control/ glucose variability
- Diabetes complications



# Prioritize Goals

## **Older adults with diabetes may have competing health priorities and geriatric syndromes**

- Important to reassess the diabetes treatment plan to lower disease and treatment burden
- Provide repeated education and support



# Diabetes Management Strategies in LTC

1. Establish individualized goals and avoid hypoglycemia
2. Simplify the diabetes treatment plan
  - Insulin Simplification Strategies
  - Insulin Sliding Scales
  - Glucose Monitoring
3. Sick Day Management

# Establish Individualized Goals



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## Glycemic targets

Comorbidities

Functional  
status

Geriatric  
syndromes

Life  
expectancy



Avoidance of hypoglycemia

# Guidelines

## American Diabetes Association 2020

**Table 12.1—Framework for considering treatment goals for glycemia, blood pressure, and dyslipidemia in older adults with diabetes (2)**

Patient characteristics/ health status	Rationale	Reasonable A1C goal‡	Fasting or preprandial glucose	Bedtime glucose
Healthy (few coexisting chronic illnesses, intact cognitive and functional status)	Longer remaining life expectancy	<7.5% (58 mmol/mol)	90–130 mg/dL (5.0–7.2 mmol/L)	90–150 mg/dL (5.0–8.3 mmol/L)
Complex/intermediate (multiple coexisting chronic illnesses* or 2+ instrumental ADL impairments or mild-to-moderate cognitive impairment)	Intermediate remaining life expectancy, high treatment burden, hypoglycemia vulnerability, fall risk	<8.0% (64 mmol/mol)	90–150 mg/dL (5.0–8.3 mmol/L)	100–180 mg/dL (5.6–10.0 mmol/L)
Very complex/poor health (LTC or end-stage chronic illnesses** or moderate-to-severe cognitive impairment or 2+ ADL dependencies)	Limited remaining life expectancy makes benefit uncertain	<8.5%† (69 mmol/mol)	100–180 mg/dL (5.6–10.0 mmol/L)	110–200 mg/dL (6.1–11.1 mmol/L)



# Hypoglycemia

## **Increased risk of:**

- Cerebrovascular events
- Arrhythmias and cardiovascular events
- Dementia
- Falls and fractures
- ED visits
- Hospitalizations
- Death





# Simplifying the Diabetes Treatment Plan

- Ensure that the patient and healthcare team can follow the plan consistently
- Minimize the risk of hypoglycemia
- Can help reduce contact time between patient and LTC staff
- Reduce polypharmacy and consolidate medications if possible



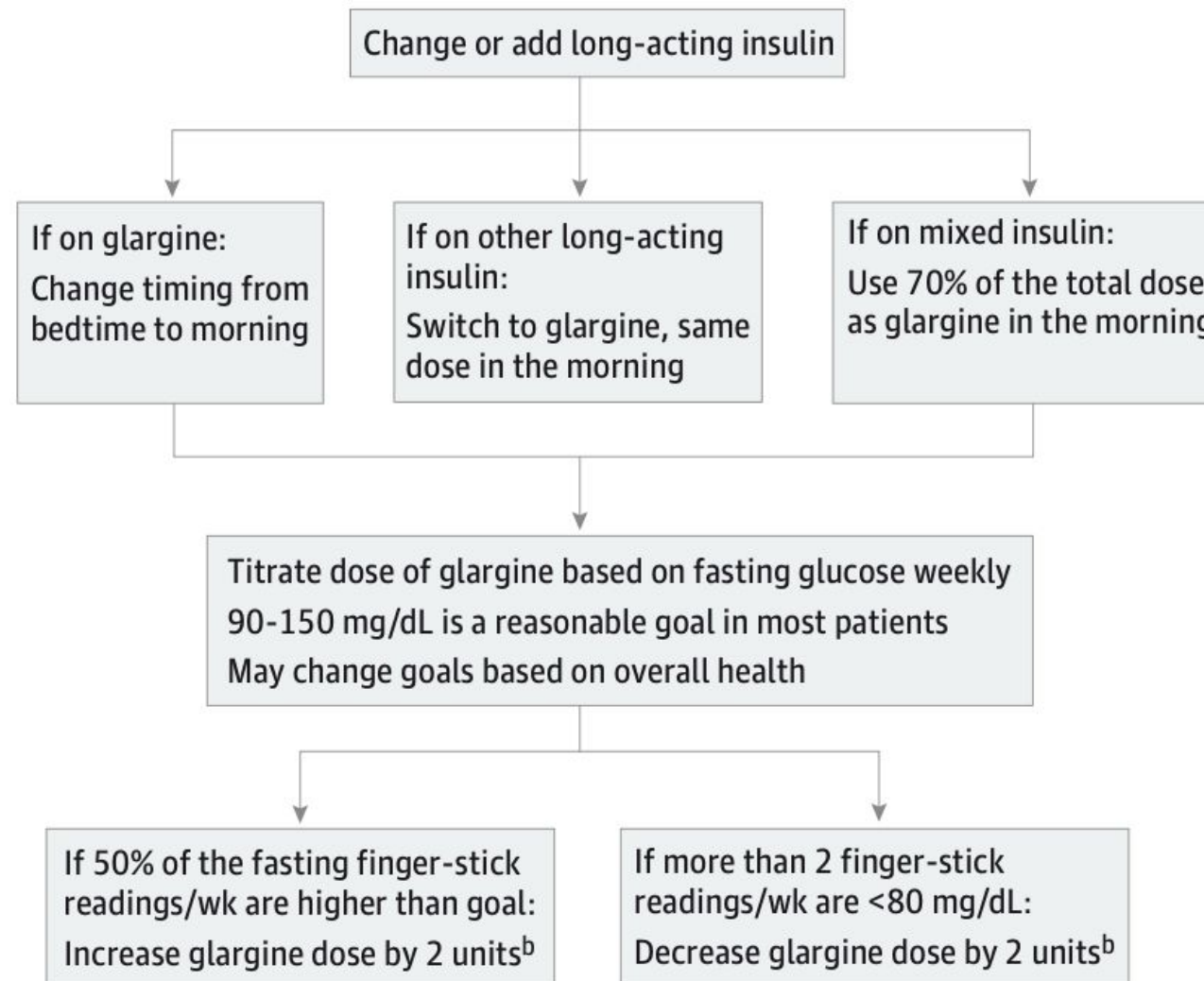
# Choosing Medications

“Start low, go slow”

- 1<sup>st</sup> line for patients with Type 2 diabetes
  - Metformin provided there are no contraindications
- Additional agents
  - Depends on your LTC institution (pharmacy formulary)
  - Cost
  - Risk of hypoglycemia
  - Comorbidities
    - Cardiovascular: GLP-1RA, SGLT2 inhibitor
    - HF: SGLT2 inhibitor
    - Obesity: GLP-1RA

**How can we simplify  
the insulin regimen if  
patients with Type 2  
diabetes are on  
multiple injections per  
day?**

# Algorithm for Basal Insulin Simplification



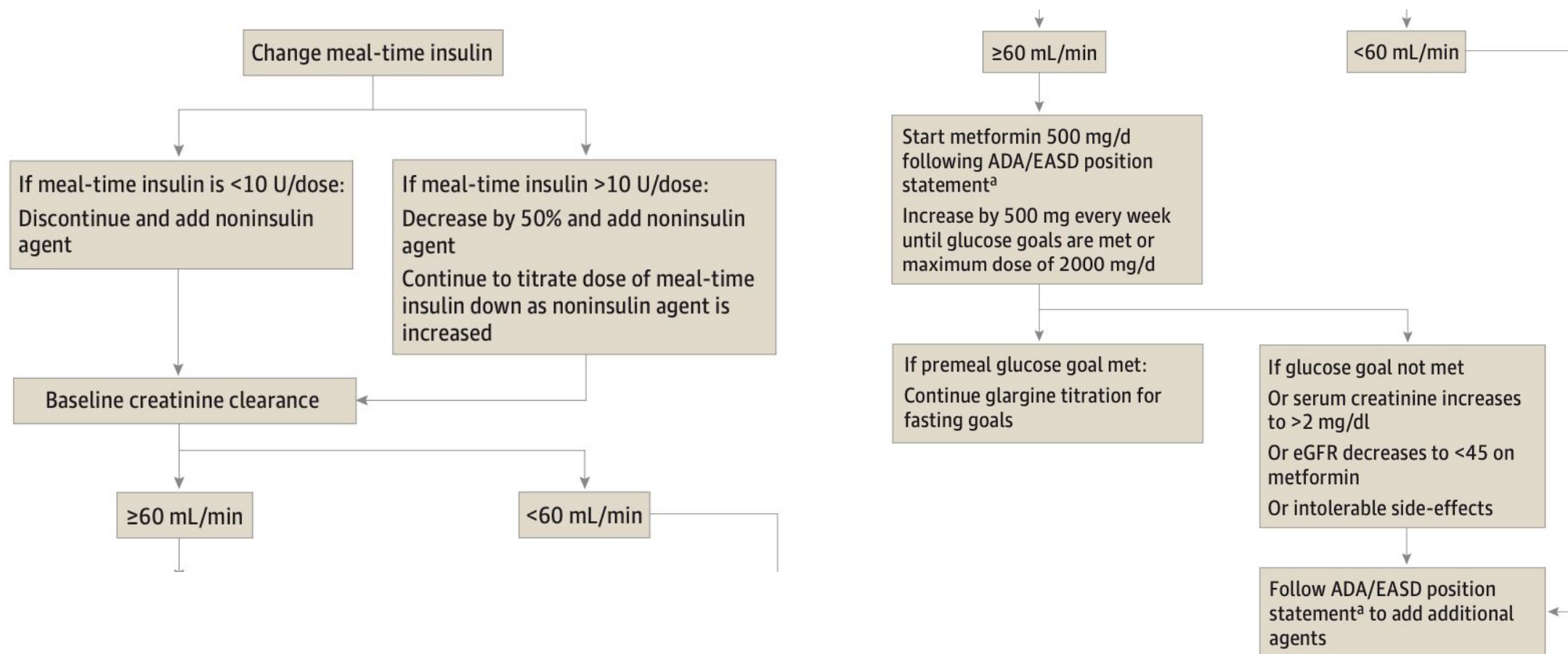
# Algorithm for Meal-time Insulin Simplification



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**What if oral agents  
are not an option?**





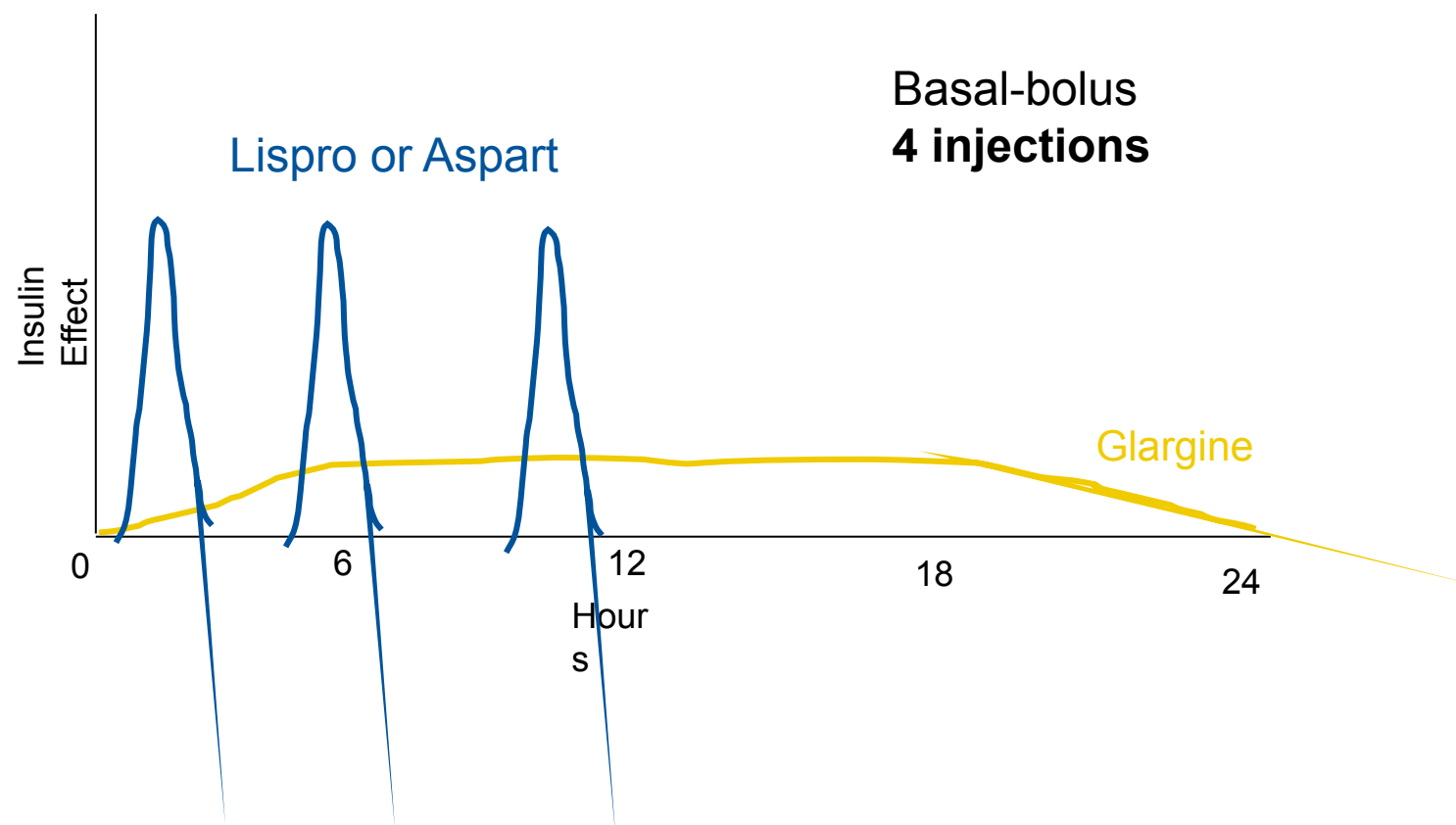
# Insulin Management Strategies



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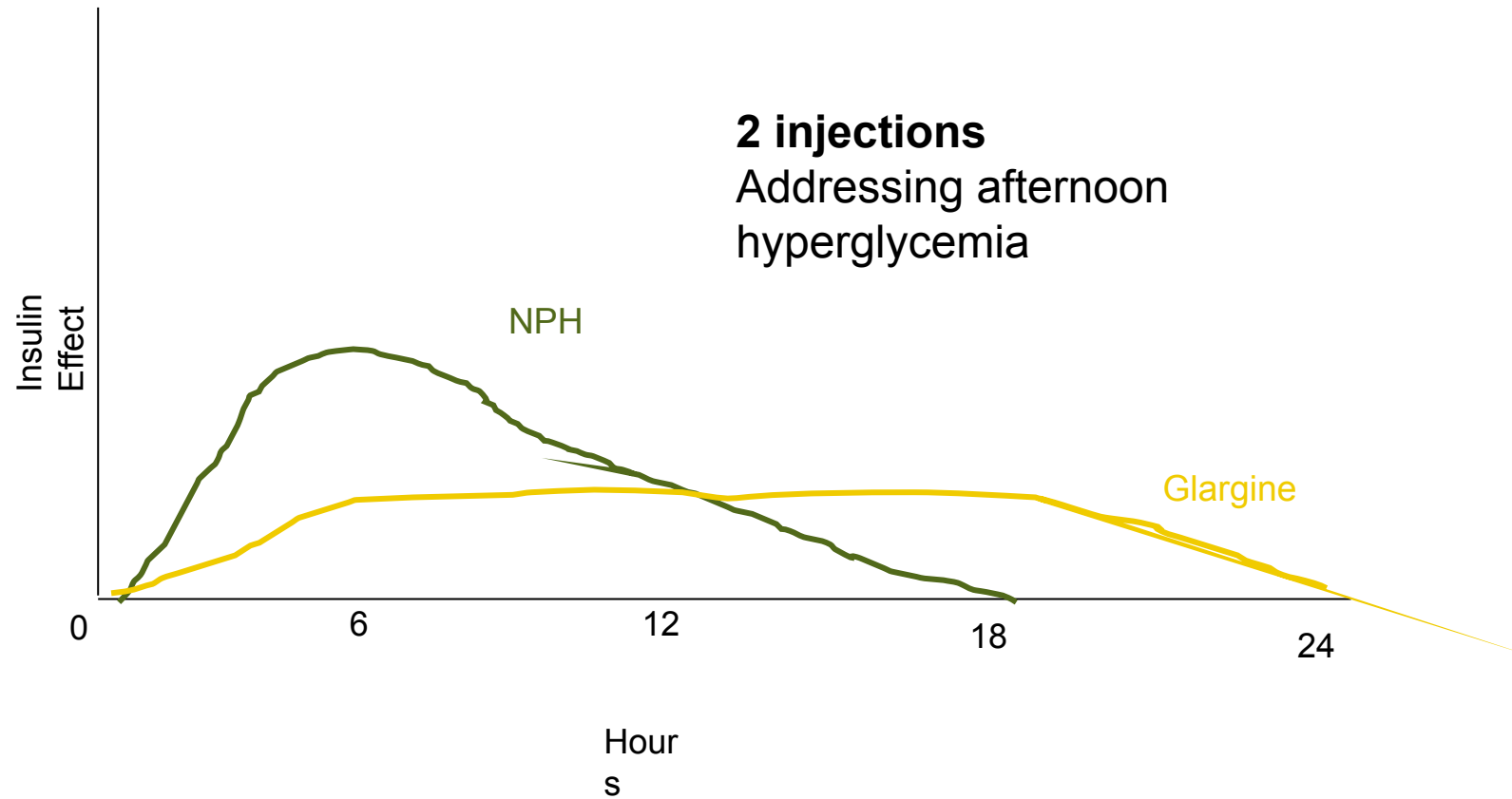
# Insulin Management Strategies



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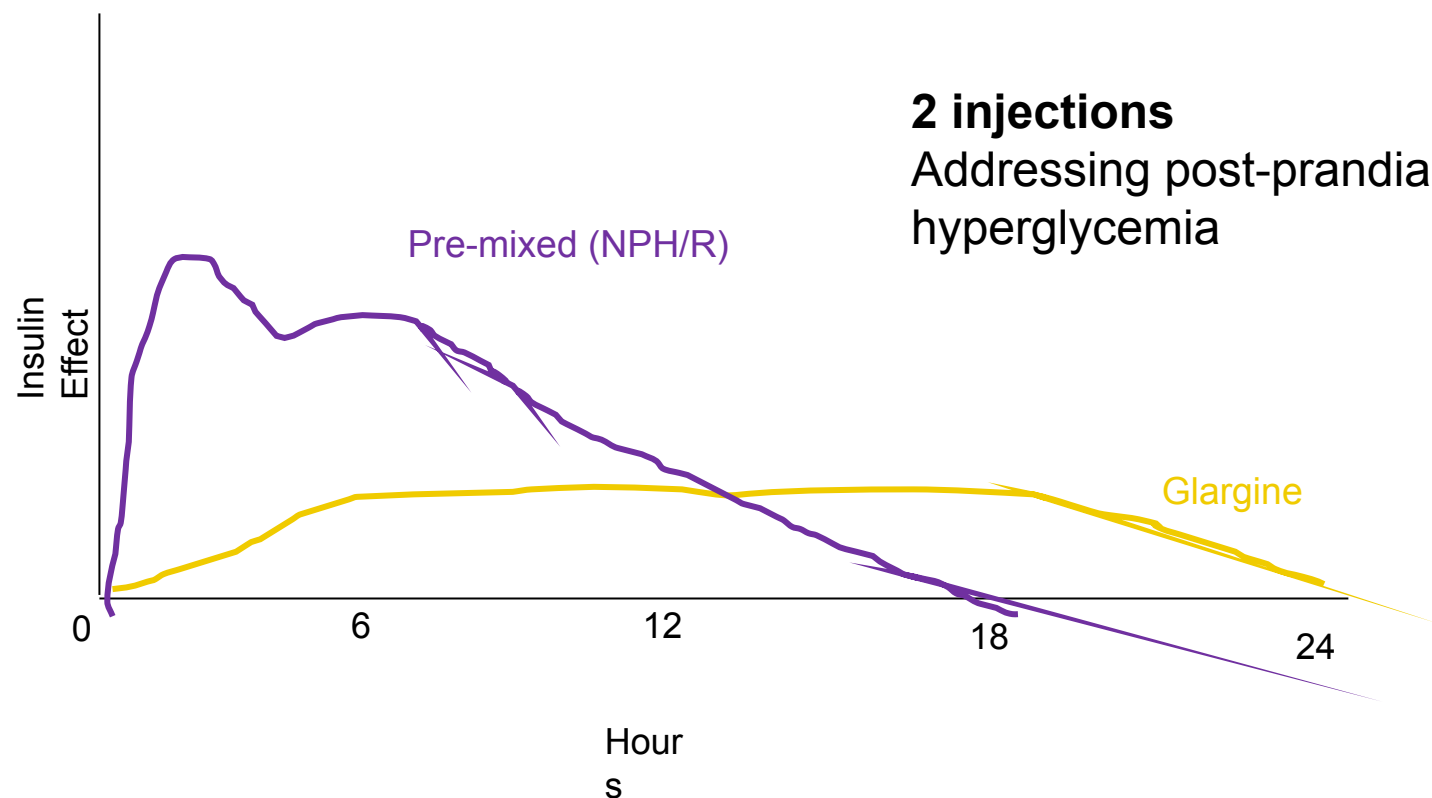
# Insulin Management Strategies



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# Issues with Insulin Sliding Scale

- Reactive
  - Leads to wide glucose excursions
- Increases the burden for patients (more frequent fingersticks)
- Increases nursing staff resources
- AGS Beers List: Higher risk of hypoglycemia without improvement in hyperglycemia management

	BG	Insulin Sliding Scale
D1 breakfast	106	0 units
D1 lunch	276	2 units
D1 dinner	184	0 units

# Strategies to Decrease Use of Sliding Scale Insulin

## Insulin Regimen

Sliding scale is sole mode of insulin treatment

Sliding scale is being used in addition to basal and scheduled meal-time insulin

Sliding scale is being used in addition to scheduled basal

Sliding scale is being used short term due to irregular dietary intake or due to acute illness

## Strategy

- Stop SSI
- Use non-insulin agents or fixed dose meal-time insulin for post-prandial hyperglycemia
- Give 50-75% of average daily sliding scale insulin as basal
- If sliding scale is being used frequently, add the average correction dose to the preceding mealtime insulin dose and stop SSI
- Use simplified correction scale
- Use non-insulin agents or fixed dose meal-time insulin
- Add 50-75% of average daily sliding scale insulin to basal
- Once health and glucose stabilize, stop SSI

# Type 1 Diabetes

## Patients with Type 1 Diabetes *always* require insulin

- Basal insulin
- Regular meal-time insulin
- A simplified correction scale can be added if blood sugars are higher than anticipated goal

E.g. If BG > 250, give 1 additional unit; if BG > 350, give 2 additional units



## Strategies for Type 1 DM with wide glucose excursions

- Rule out other causes (infection, change in health status) for glucose variability
- Change insulin from bedtime to morning
  - Avoid morning lows – overnight gluconeogenesis is not as prominent in older adults
- If the patient skips meal, omit the mealtime insulin
- If eating is erratic, administration of insulin can occur immediately post-prandially

# Glucose Monitoring

- Patients with Type 1 diabetes still require glucose checks before meals
- In patients with Type 2 diabetes, glucose monitoring can be decreased to once per day if diabetes control is stable
  - Check fasting glucose on some days; pre-lunch or pre-dinner on other days
  - If glycemic control is optimal, less frequent testing is recommended
  - Stop checking blood sugars before bedtime

# Sick Day Management

- Encourage fluid intake to reduce risk of dehydration and falls
- More frequent glucose monitoring
- Hold metformin and SGLT2 inhibitors
- Use short-term insulin if experiencing significant hyperglycemia
- Testing for ketones in Type 1 patients
- Diabetic ketoacidosis and Hyperosmolar Hypoglycemic Syndrome are medical emergencies

- For patients with COVID-19 infection:
- Tend to have increased insulin resistance
    - May require short term insulin



# Utilizing Technology in the LTC Setting



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- Telemedicine
  - Consultations with Diabetologists
  - Retinopathy Screening
  - Diabetic Footcare
- Continuous blood glucose monitoring

# Key Takeaways

- Established individualized glycemic goals for older adults with diabetes in LTC
- Simplify the diabetes treatment plan
  - Lower disease and treatment burden
  - Avoid hypoglycemia
- Capitalize on technology to address the patients' needs





- COVID-19:
  - American Diabetes Association:  
<https://professional.diabetes.org/content-page/covid-19>
  - Joslin Diabetes Center COVID-19 Course:  
<https://www.joslin.org/covid-19-diabetes-course>
  - Lancet – Practical Recommendations for the management of diabetes in patients with COVID-19:  
[https://doi.org/10.1016/S2213-8587\(20\)30152-2](https://doi.org/10.1016/S2213-8587(20)30152-2)
  - American Geriatrics Society Policy Brief: COVID-19 and Nursing Homes:  
<https://doi.org/10.1111/jgs.16477>
- Diabetes care in Older Adults
  - American Diabetes Association - Older Adults: *Standards of Medical Care in Diabetes 2020*:  
<https://doi.org/10.2337/dc20-S012>
  - Management of Diabetes in Long-term Care and Skilled Nursing Facilities: A Position Statement of the American Diabetes Association:  
<https://doi.org/10.2337/dc15-2512>
  - Insulin Simplification Algorithm:  
<https://doi.org/10.1001/jamainternmed.2016.2288>

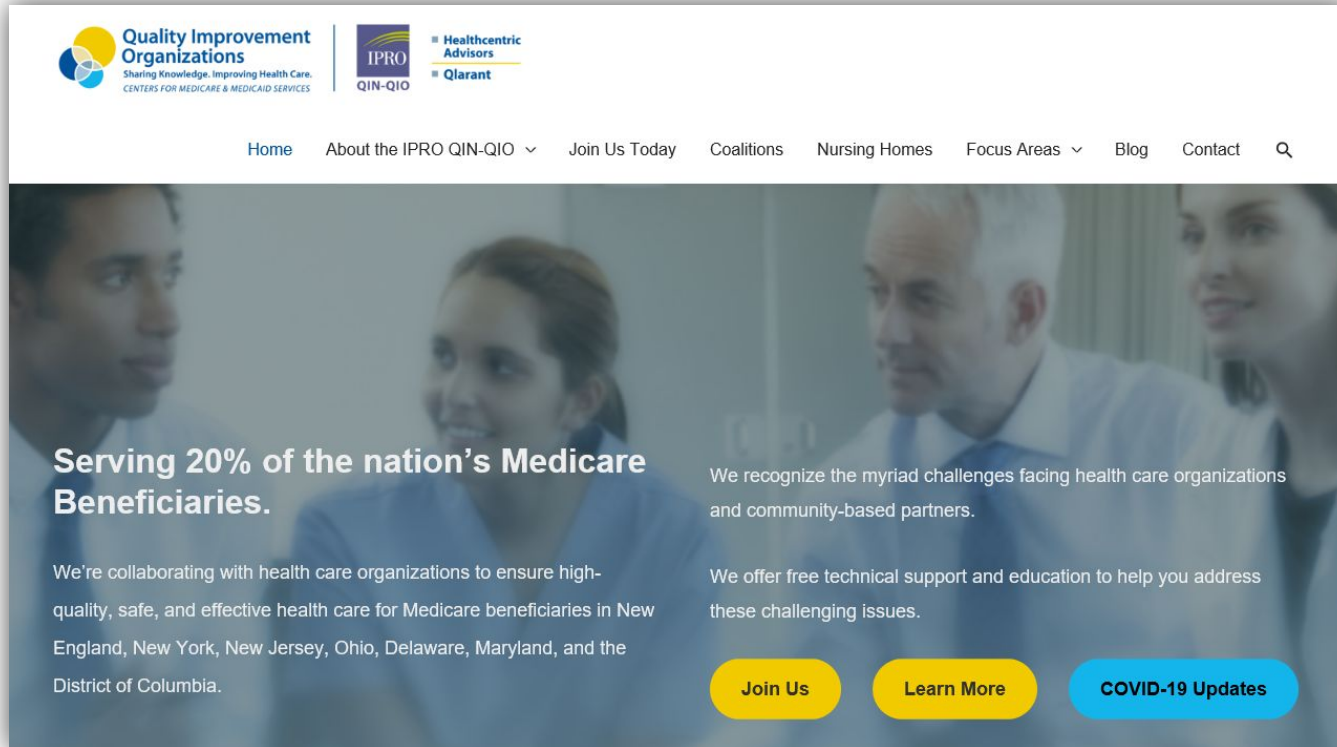
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