CHCANYS Diabetes Continuum of Care Conversation

Supporting Patients' Diabetes Management & Optimizing Care Delivery

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June 12, 2024
CHCANYS

Disclosures

- No Financial Disclosures

Framework

- 90 minute session
- My presentation is over an hour
- Questions/ comments in the chat
- Will save time at the end
- Sharing my screen: You will see me moving my video box

Framework

- People with T2DM
  - Are at risk for multiple co-morbidities (diabetic retinopathy, chronic kidney disease)
  - Often benefit from a regimen designed with cardiorenal protection in mind
  - Perhaps benefit from a continuous glucose monitor
  - Have a long daily ‘to do list’ which can feel burdensome
  - Particularly true for high risk patients with long standing and uncontrolled disease
  - Require support of a coordinated diabetes care team

Learning Objectives

- Defining and providing examples of optimal diabetes management care delivery services to support high risk patient populations at risk of further developing complications, such as chronic kidney disease and diabetic retinopathy

- Identifying solutions to common barriers in support of increased patient activation as well as care plan and medication adherence

- Illuminate workflows and processes to support innovations in clinical care, such as remote patient monitoring, to ensure patient self-empowerment and management of insulin levels, and greater communication and shared decision-making between the patient and care team

Framework

NYU School of Medicine
NYU LANGONE MEDICAL CENTER

- At Bellevue we are lucky to have a team
  - PCAs (medical assistants)
  - PCPs
  - Pharm Ds
  - Diabetes Nursing Team
  - Nutritionist
  - Community Health Workers and Social Workers
  - Depression Care Team
  - Epic/EMR IT
  - The Patient !!

Framework

- In this talk we'll focus on the patient with *uncontrolled* T2DM

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HEALTH+
HOSPITALS
Bellevue

NYU School of Medicine
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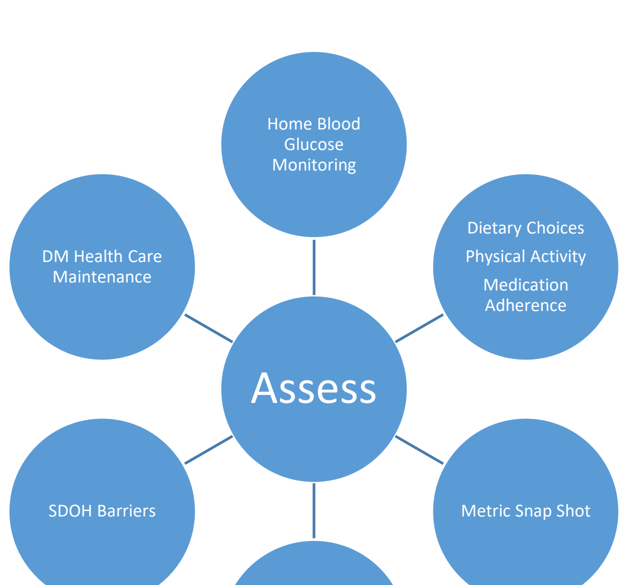
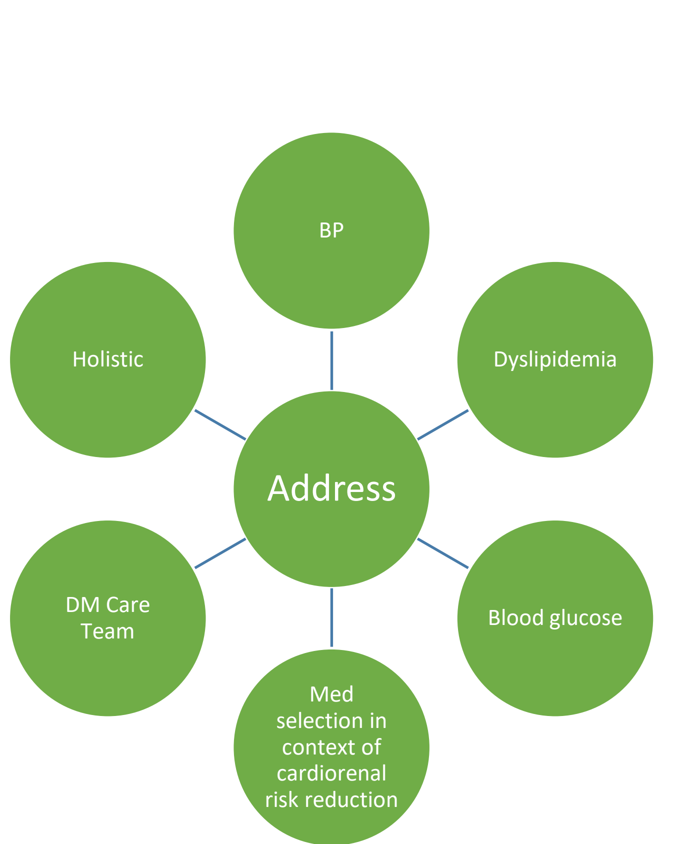
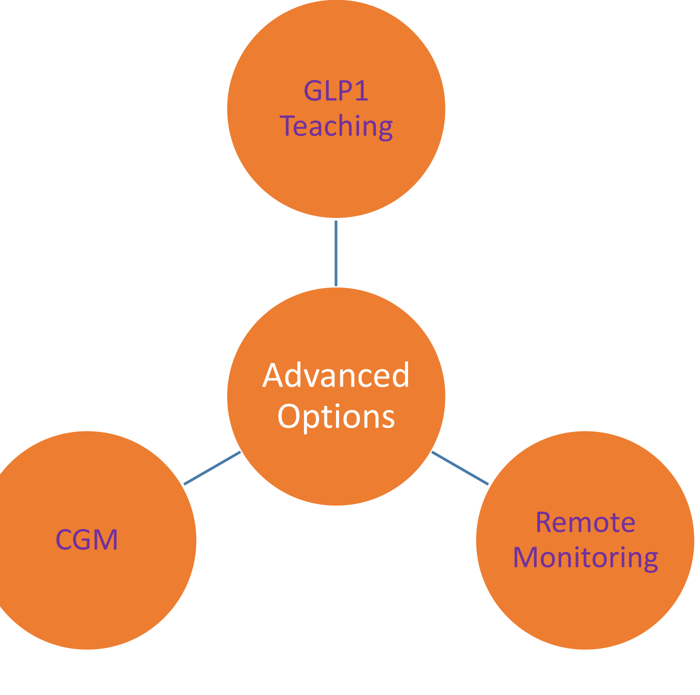

Home Blood Glucose Monitoring
DM Health Care Maintenance
Dietary Choices
Physical Activity
Medication Adherence
Assess
SDOH Barriers
Metric Snap Shot
Comorbidities


BP
Holistic
Dyslipidemia
Address
DM Care Team
Blood glucose
Med selection in context of cardiorenal risk reduction


GLP1 Teaching
Advanced Options
CGM
Remote Monitoring

The numbers 19 and 20 got into a fight.

21.

Things to Assess

- Patient awareness of disease state
- Dietary Choices
- Physical Activity
- Medication Adherence
- Metric Snap Shot
- Comorbidities
- Barriers
- DM Health Care Maintenance

Things to Assess

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  Physical Activity
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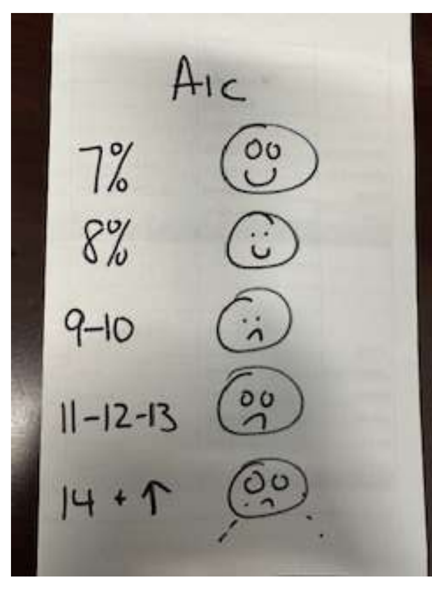
- Ensure person understands how uncontrolled their DM is currently
  - Ask if they have heard of the A1c test
  - Sketch out a quick chart
  - Ask if they know their A1c
  - Have them show me where their A1c is
  - Discuss the interpretation of their number



- Trend A1c on the screen to show the value and chronicity of poor control
- Take this as a first opportunity to
  - Inspire: Point out periods where control was good!
  - Reality: Show that is been uncontrolled for a long time

12/10/2020	1/7/2021	3/22/2021	4/29/2021	6/17/2021	8/19/2021	11/4/2021	2/7/2022	3/24/2022	6/7/2022	12/15/2022	2/16/2023	5/4/2023	7/6/2023	11/9/2023	2/1/2024
10.8 ^	10.3 ^ 10.1 ^	8.2 ^	8.2 ^	9.4 ^	11.7 ^	11.4 ^	10.9 ^	9.9 ^	7.5 ^	9.7 ^	8.8 ^	7.0 ^	7.2 ^	8.5 ^	11.3 ^

12/9/2021	12/10/2021	2/28/2022	4/5/2022	5/9/2022	7/20/2022	8/31/2022	10/28/2022	12/6/2022	1/10/2023	3/20/2023	5/1/2023	9/22/2023	11/9/2023	3/21/2024
>14.0 ^	15.1 ^	15.0 ^	>14.0 ^	14.6 ^	>14.0 ^	>14.0 ^	14.4 ^	13.0 ^	>14.0 ^	14.0 ^	14.3 ^	>14.0 ^	17.3 ^	17.4 ^
							366.6 ^			355.1 ^	363.7 ^		449.8 ^	452.7 ^

Things to Assess

- Patient awareness of disease state
- 3 Ways to treat T2DM:
  - Physical Activity
  - Dietary Choices
  - Medication
- Metric Snap Shot
- Comorbidities
- Barriers
- DM Health Care Maintenance

3 ways to treat T2DM

- Three ways to treat T2DM
  - Being more physically active
  - Eating Healthier
  - Medication
- Assess each category
- Start with…
  - not medications

A1c Clinic
PCP- Levy, Natalie, MD
Last encounter (visit or telephone call) with me- 4/18/2024

y.o. male

Duration of Diabetes

Interim hx

Exercise

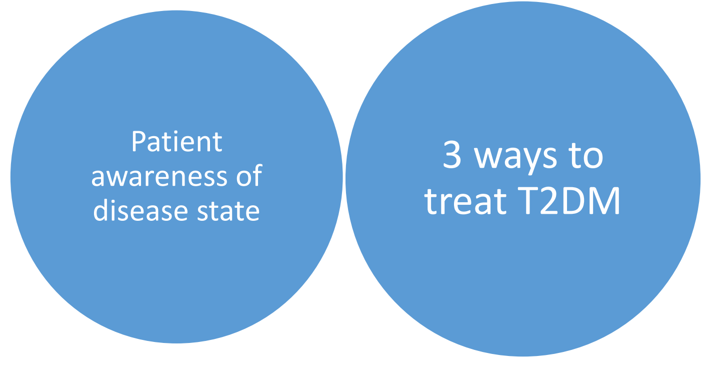
Food

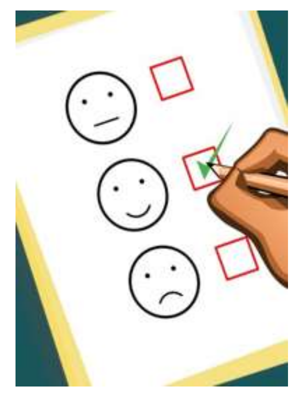
Medications

Current Outpatient Medications on File Prior to Visit

Medication	Sig	Dispense	Refill
• Alcohol Swabs 70 % Pads	1 each 2 (two) times a day.	200 each	1
• amLODIPine (NORVASC) 5 MG tablet	Take 1 tablet (5 mg total) by mouth daily.	90 tablet	1
• aspirin (BAYER) 81 MG chewable tablet	Chew 1 tablet (81 mg total) daily.	90 tablet	1

- Medication List Review
- Establish an accurate baseline of current medication use
- Create a comfort level that allows people to share what they are actually taking
  - "I see what is prescribed, let me start by asking you what you are actually taking"
  - "Glargine dose is 40 units at night"
    - How often do you change the dose…. and take 30 or 36 or 42?
    - Out of 7 nights, how often do you forget to take your insulin? Or get into bed and realize you didn't take it but you are too tired at that point to get back up?
  - "Your Metformin is written as twice a day"
    - Out of 7 days in the week, how many days do you take it once a day?
- Ask about side effects: that make you miserable or make you need to skip a dose?
  - GLP1/Metformin-N/V/D?
  - SGLT2i-GU?





- Normalize non full adherence
  - Encourage them to share truthfully
  - No one is ‘in trouble’
- Find something positive to comment on
- We are aiming for your best, not ‘perfect’

Things to Assess

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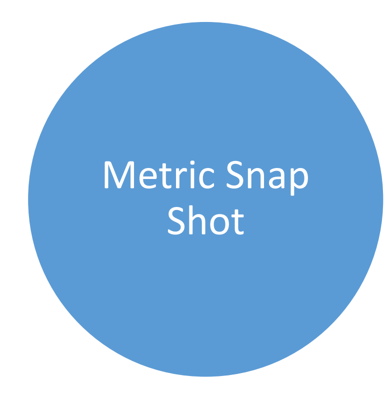

- Assess
  - Blood Pressure
  - Lipid Panel
  - Blood Glucose

PCA- BP Partners

Proper blood pressure measurement

Component Ref Range & Units	2/14/23 0922	12/6/22 1503
Cholesterol <=200 mg/dL	150	229 ^
HDL Cholesterol >=40 mg/dL	32 v	39 v
Triglyceride <=150 mg/dL	166 ^	381 ^
Non-HDL Cholesterol mg/dL	118	190
LDL Cholesterol Calculated <=100 mg/dL	85	114 ^

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Metric Snap Shot

- Assess
  - Blood Pressure
  - Lipid Panel
  - Blood Glucose

12/10/2020	1/7/2021	3/22/2021	4/29/2021	6/17/2021	8/19/2021	11/4/2021	2/7/2022	3/24/2022	6/7/2022	12/15/2022	2/16/2023	5/4/2023	7/6/2023	11/9/2023	2/1/2024
10.8 ^	10.3 ^ 10.1 ^	8.2 ^	8.2 ^	9.4 ^	11.7 ^	11.4 ^	10.9 ^	9.9 ^	7.5 ^	9.7 ^	8.8 ^	7.0 ^	7.2 ^	8.5 ^	11.3 ^

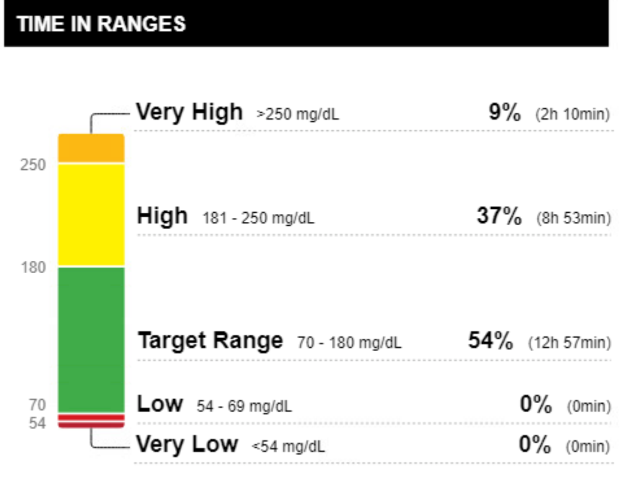
GLUCOSE STATISTICS AND TARGETS

April 14, 2024 - April 27, 2024	14 Days
Time CGM Active:	98%

Ranges And Targets For	Type 1 or Type 2 Diabetes
Glucose Ranges Target Range 70-180 mg/dL	Targets % of Readings (Time/Day) Greater than 70% (16h 48min)
Below 70 mg/dL	Less than 4% (58min)
Below 54 mg/dL	Less than 1% (14min)
Above 180 mg/dL	Less than 25% (6h)
Above 250 mg/dL	Less than 5% (1h 12min)
Each 5% increase in time in range (70-180 mg/dL) is clinically beneficial.	

Average Glucose	179 mg/dL
Glucose Management Indicator (GMI)	7.6%
Glucose Variability	26.7%

Defined as percent coefficient of variation (%CV); target ≤36%



BLOOD SUGAR LOG

Date	#	Before	After	Notes
	Breakfast			
	Lunch			
	Dinner			
	Bedtime			
	Breakfast			
	Lunch			
	Dinner			
	Bedtime			
	Breakfast			
	Lunch			
	Dinner			
	Bedtime			
	Breakfast			
	Lunch			
	Dinner			
	Bedtime			
	Breakfast			
	Lunch			
	Dinner			
	Bedtime			
	Breakfast			
	Lunch			
	Dinner			
	Bedtime			
	Breakfast			
	Lunch			
	Dinner			
	Bedtime			

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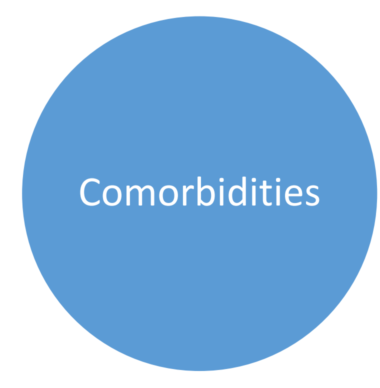
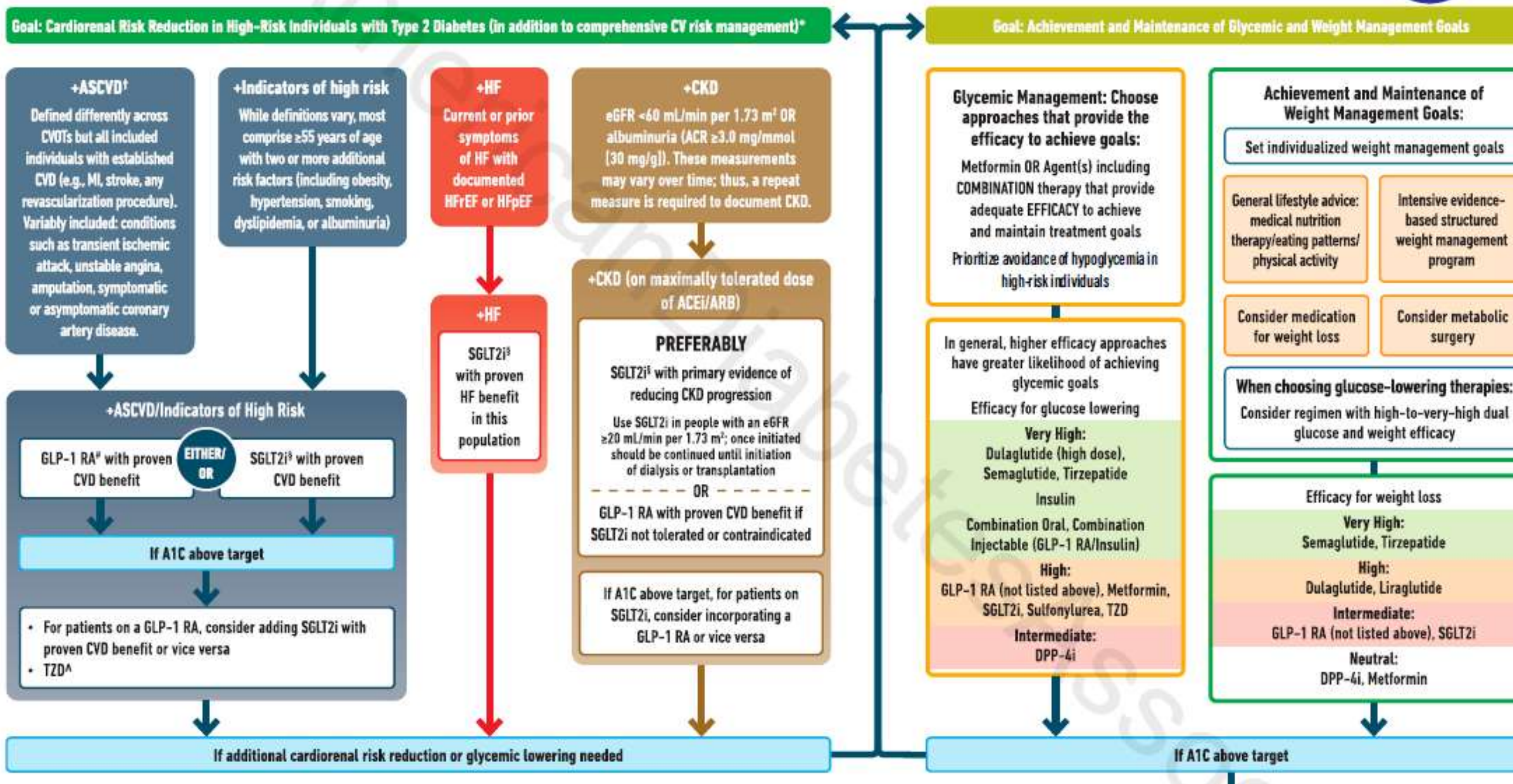


- Retinopathy
- BMI
- Nephropathy
  - UACR, GFR
- Heart Failure
- ASCVD
  - CAD, CVA, PVD



Diabetic Retinopathy

- Diabetic retinopathy is a leading cause of vision loss
- Increased risks with
  - Longer duration of diabetes
  - Worse glycemic control
- Important to screen all patients with T2DM for DM retinopathy
  - At diagnosis
  - In general, annually

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DR Screen:Workflow

- At Bellevue we have a retinal camera
- H+H Central Office made the investment
- Everyone wins
    - The patient- same day
    - The system
        - Patients with normal scans do not take up spots on the ophtho schedule
        - Patients with abnormal scans or other eye conditions can get into ophtho more easily

DR Workflow

Retinal scan
Epic
Facilities
Ophtho
PCAs
PCPs

Provider has time to prechart and orders scan ahead of visit

- Done at visit intake

Provider orders scan during visit

- Done at visit outtake

Scan sent to ophtho reading pool

Scan Normal?

Yes

Results to
MyChart
PCP

No

Results to
MyChart
PCP
OPHTHO: arranged appt

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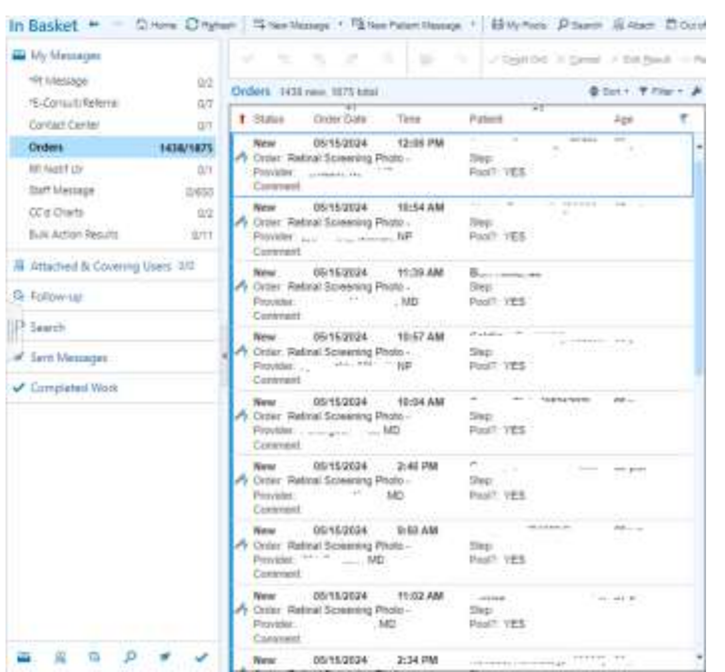
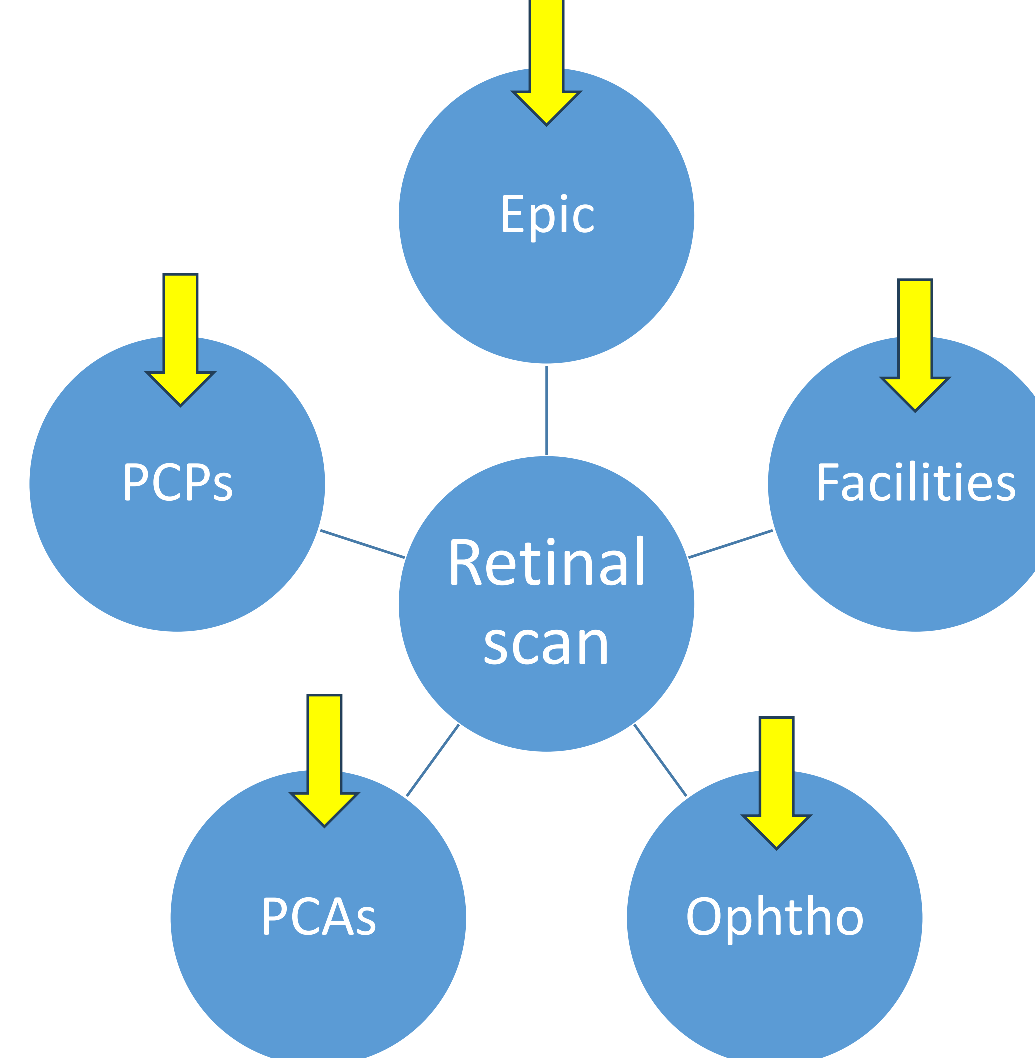
DR Workflow: Prep Work

NYU School of
NYU LANGONE M



After Visit
Retinal Screening Photo - OU - Both Eyes - Expires: 3 Months
retinal
ADD DX (0)



DR Workflow

Retinal scan

Epic

PCPs

Facilities

PCAs

Ophtho

Provider has time to prechart and orders scan ahead of visit

- Retinal scan done at intake

Provider orders scan during visit

- Retinal scan done at outtake

Scan sent to ophtho reading pool

Scan Normal?

Yes

Results to
MyChart
PCP

No

Results to
MyChart
PCP
OPHTHO: arranged appt

DR Workflow: Day of

Pre-chart?

- Retinal Scan is done at intake

Chart review during visit

- Retinal Scan is done at outtake

Chart Review | Synopsis | Problem List | SnapShot | findhelp Patient Profile | Pre Epic Encounter | Report Viewer | Health Maintenance

Health Maintenance

Address Topic | Remove Override | Add Topic | Document Past Immunization | Edit Modifiers | Report | Refresh | H+H Guidelines

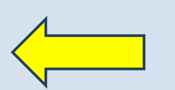
Topic	Due Date	Frequency	Date Completed	
Current Care Gaps				
A1C (MANAGEMENT)	Overdue since 4/11/2024	3 month(s)	1/11/2024 - H...	12/13/2
Upcoming				
NEPHROPATHY (eGFR, MICROALBUMIN)	Next due on 7/30/2024	1 year(s)	7/30/2023 - HHC ...	
HIV SCREENING	Next due on 2/1/2025	1 year(s)	2/1/2024 - HIV A...	8/20/2006
LIPID PANEL	Next due on 2/1/2025	1 year(s)	2/1/2024 - Multipl...	2/4/202
RETINOPATHY SCREEN	Next due on 3/26/2025	1 year(s)	3/26/2024 - Had ...	1/25/2024
TDAP/TD VACCINE	Next due on 4/17/2033	10 year(s)	4/17/2023 - TDa...	3/28/2013
COLORECTAL CANCER SCREENING (COLONOSCOPY - Pre...	Next due on 3/22/2034	10 year(s)	3/22/2024 - END...	3/22/2024
Completed or No Longer Recommended				
HEPATITIS C SCREENING	Tentatively Complete	Once	11/13/2020 - Hep...	
ABDOMINAL AORTIC ANEURYSM (AAA) SCREEN	Completed	Once	3/8/2022 - US Ab...	8/10/2021
ZOSTER (SHINGRIX) VACCINE	Completed	Imm Details	5/2/2022 - (shingl...	2/3/2022 -
PNEUMOCOCCAL 65+ YEARS VACCINE	Completed	Imm Details	9/20/2023 - PNE...	2/3/2022 -
INFLUENZA VACCINE	Completed	Imm Details	12/13/2023 - Influ...	10/27/2022
COVID VACCINE	Completed	Imm Details	1/5/2024 - Pfizer ...	11/18/2022
HEPATITIS B VACCINE	Aged Out	Imm Details		
HUMAN PAPILLOMA VIRUS (HPV) VACCINE	Aged Out	Imm Details		

DR Workflow: Day of

Pre-chart?

Scan ordered ahead of visit

- Retinal Scan is done at intake



Charts during visit?

Scan ordered for after the visit

- Retinal Scan is done at outtake

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DR Workflow: Day of

LEVY, NATALIE | Filter by Status | Total: 5

Time	Pri?	Status	Status Details	Events	Patient	Age/Gender	DOB	MRN	Notes	My Sticky Note	Last H...	HBA1C Date
		BE PRIMARY CARE										
9:40 a		Scheduled							Intake: POC A1c, retinal scan		7.9	10/10/2023
10:00 a		Scheduled							POC A1c		8.2	02/06/2024
10:20 a		Scheduled							POC A1c. (Add Zetia. LDL goal ideally <70. 90s on atorva 40.)		8.4	02/15/2024
10:40 a		Scheduled							Intake: Retinal Scan		8.8	05/07/2024
11:00 a		Scheduled							(recheck c peptide and bmp)		8.7	05/02/2024

DR Workflow: Day of

Time to pre-chart?

scan ordered ahead of visit

- Retinal Scan is done at intake

Charts during visit?

scan ordered for after the visit

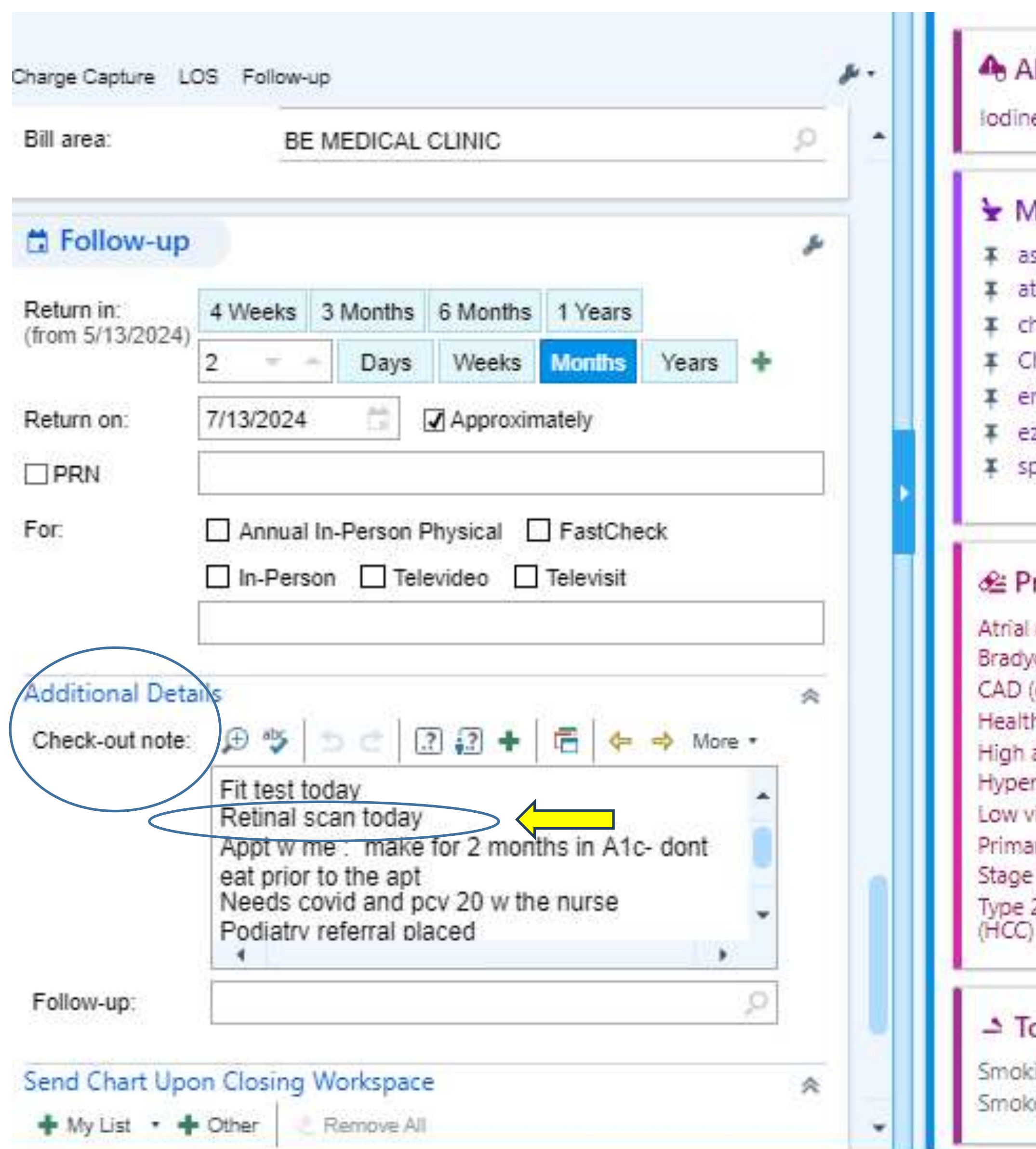
- Retinal Scan is done at outtake

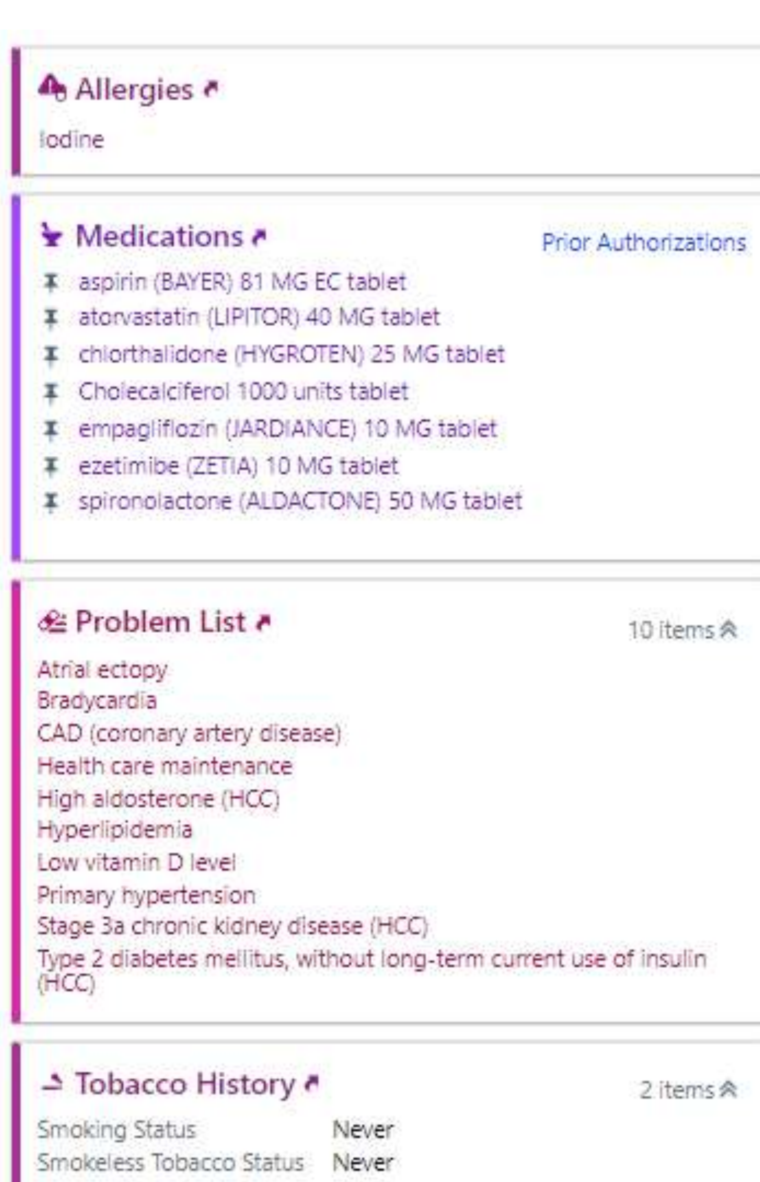
Bellevue

DR Workflow: Day of

Provider charts during visit and orders scan for after the visit

- Types 'retinal scan' in check out note
- Done at outtake





DR Workflow

Retinal scan
- Epic
- Facilities
- Ophtho
- PCAs
- PCPs

Time to pre-chart
- Retinal scan done at intake

Chart review during appt
- Retina scan done at outtake

Scan sent to ophtho reading pool

Scan Normal?

Yes: Results to MyChart, PCP

No: Results to MyChart, PCP, OPHTHO: arranged appt

DR Workflow: Post Production

Scan sent to ophtho reading pool

Scan Normal?

Yes

Results to
MyChart
PCP

No

Results to
MyChart
PCP
OPHTHO: arrange appt

Retinal Screening Photo - OU - Both Eyes

Status: Final result   Visible to patient: No (not released)   Next appt: 05/09/2024 at 10:40 AM in Primary Care (Natalie Levy, MD)   Dx: Type 2 diabetes mellitus with other s...

1 Result Note | 1 HM Topic

Details

Reading Physician	Reading Date	Result Priority
	5/6/2021	Routine

Narrative

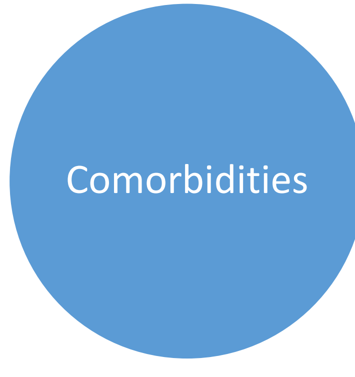
```
Follow-up needed in the Eye Clinic?
Yes


Evidence of Diabetic Retinopathy
Yes


Follow-up in Eye Clinic
General Ophthalmology Clinic

Time to scheduled visit
Within 1 month
```

Exam Ended: 05/04/21 14:06

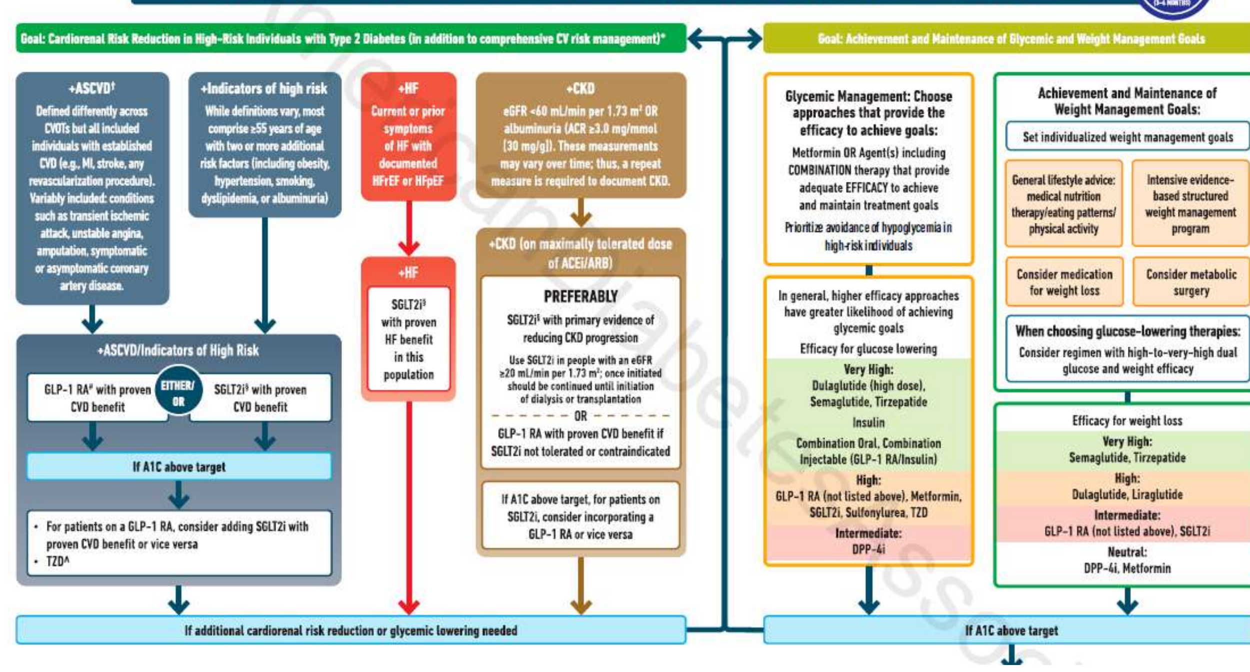
Last Resulted: 05/06/21 10:41

Mark as an Unsuccessful Attempt

Order Details   View Encounter



- Retinopathy
- Nephropathy
  - UACR, GFR
- Heart Failure
- ASCVD
  - CAD, CVA, PVD
- BMI



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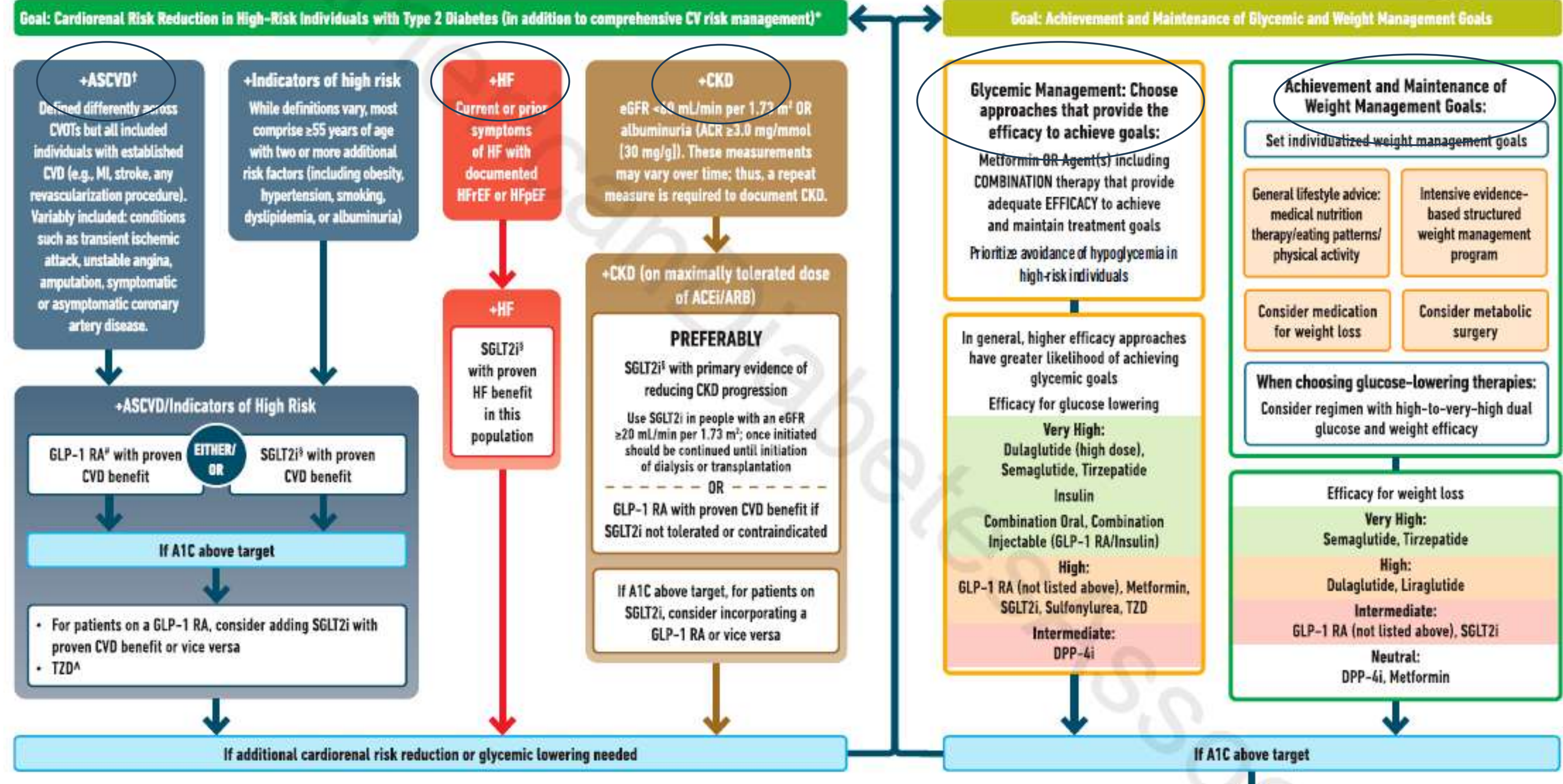
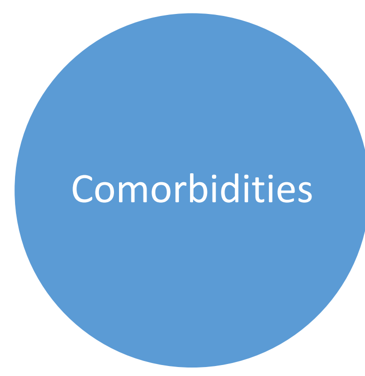
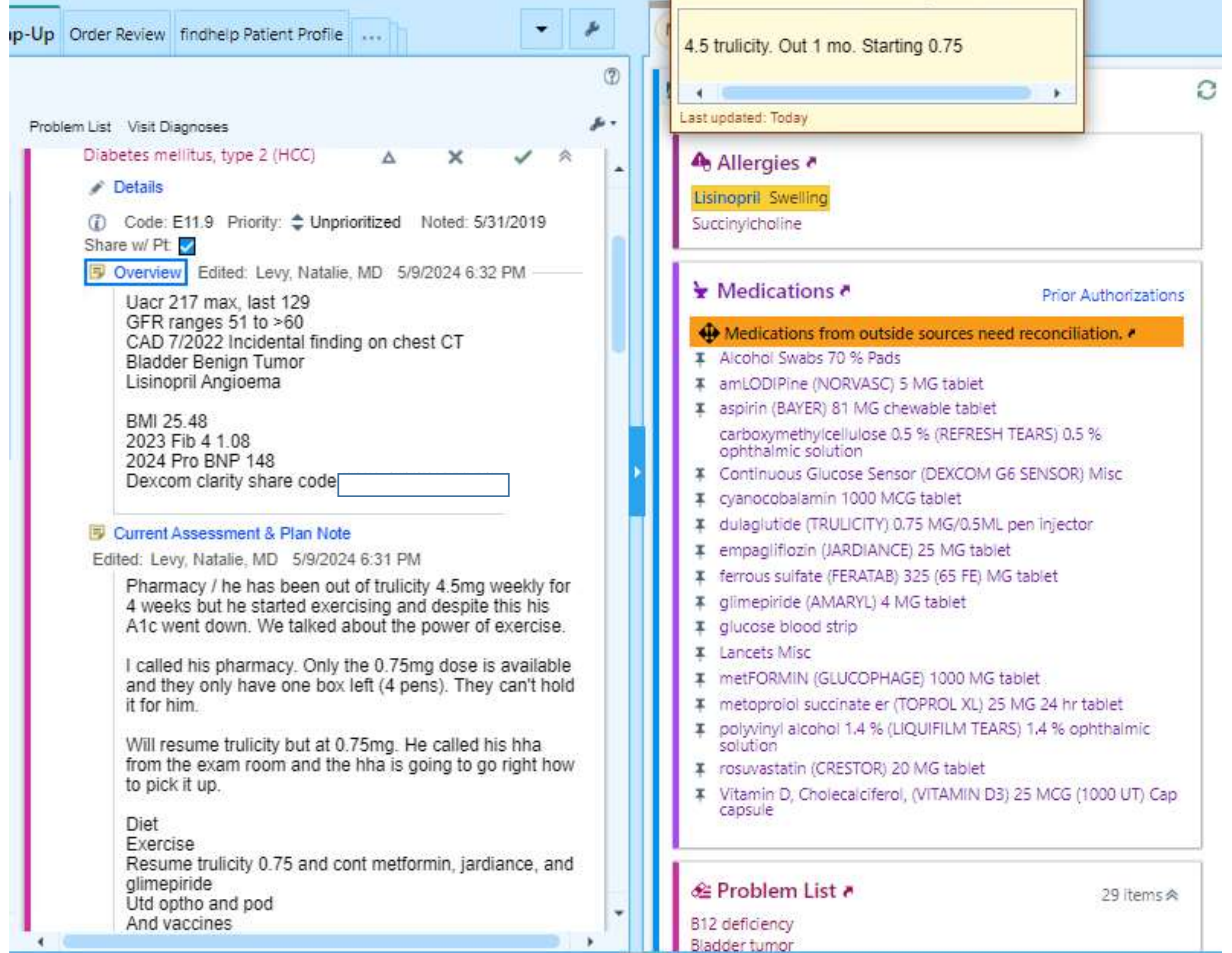
Standards of Care in Diabetes—2024

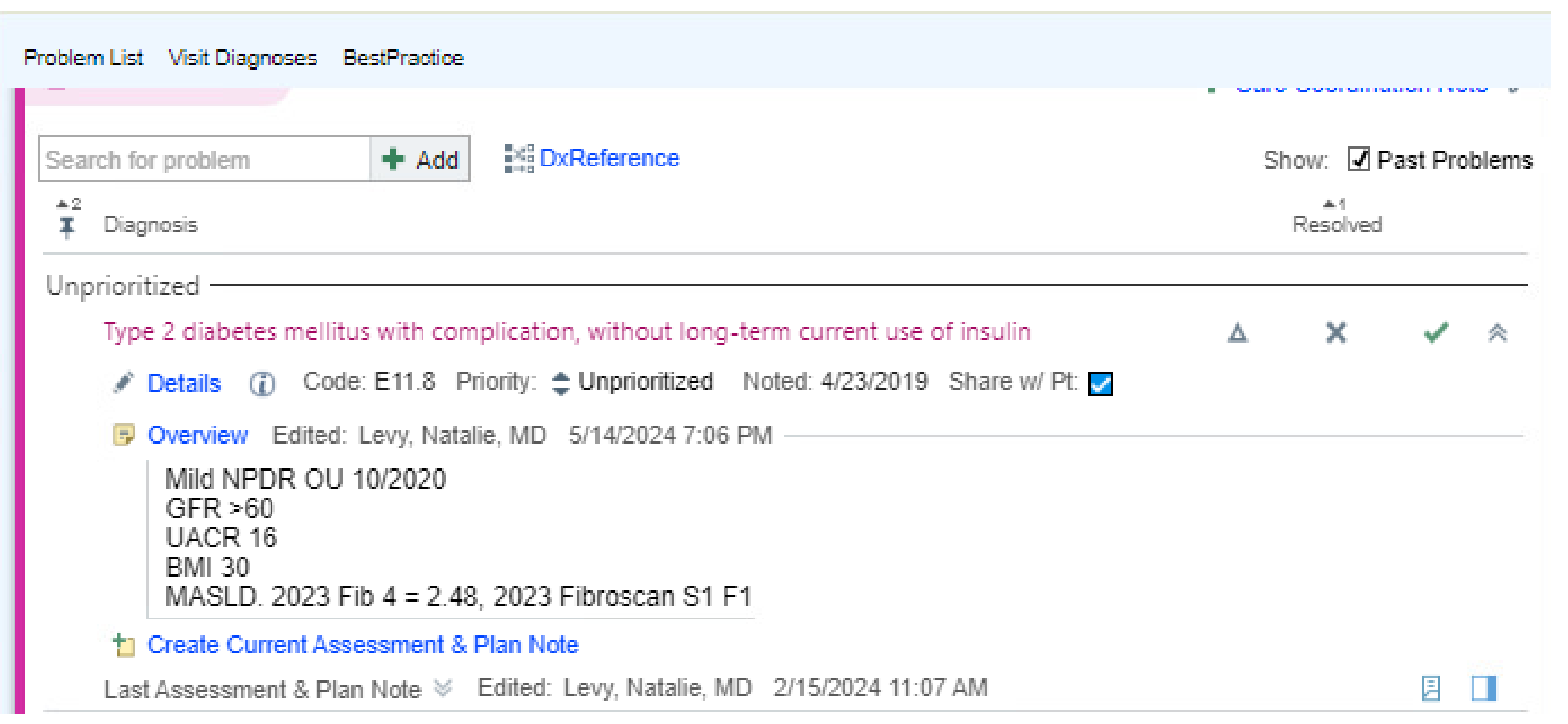

USE OF GLUCOSE-LOWERING MEDICATIONS IN THE MANAGEMENT OF TYPE 2 DIABETES
HEALTHY LIFESTYLE BEHAVIORS; DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT (DSMES); SOCIAL DETERMINANTS OF HEALTH (SDOH)
TO AVOID THERAPEUTIC INERTIA REASSESS AND MODIFY TREATMENT REGULARLY (3-6 MONTHS)
Goal: Cardiorenal Risk Reduction in High-Risk Individuals with Type 2 Diabetes (in addition to comprehensive CV risk management)*
Goal: Achievement and Maintenance of Glycemic and Weight Management Goals
+ASCVD†
Defined differently across CVOTs but all included individuals with established CVD (e.g., MI, stroke, any revascularization procedure). Variably included: conditions such as transient ischemic attack, unstable angina, amputation, symptomatic or asymptomatic coronary artery disease.
+Indicators of high risk
While definitions vary, most comprise ≥55 years of age with two or more additional risk factors (including obesity, hypertension, smoking, dyslipidemia, or albuminuria)
+HF
Current or prior symptoms of HF with documented HFrEF or HFpEF
+CKD
eGFR <60 mL/min per 1.73 m² OR albuminuria (ACR ≥3.0 mg/mmol [30 mg/g]). These measurements may vary over time; thus, a repeat measure is required to document CKD.
+ASCVD/Indicators of High Risk
GLP-1 RA# with proven CVD benefit
EITHER/OR
SGLT2i§ with proven CVD benefit
If A1C above target
For patients on a GLP-1 RA, consider adding SGLT2i with proven CVD benefit or vice versa
TZD^
+HF
SGLT2i§ with proven HF benefit in this population
+CKD (on maximally tolerated dose of ACEi/ARB)
PREFERABLY
SGLT2i§ with primary evidence of reducing CKD progression
Use SGLT2i in people with an eGFR ≥20 mL/min per 1.73 m²; once initiated should be continued until initiation of dialysis or transplantation
OR
GLP-1 RA with proven CVD benefit if SGLT2i not tolerated or contraindicated
If A1C above target, for patients on SGLT2i, consider incorporating a GLP-1 RA or vice versa
Glycemic Management: Choose approaches that provide the efficacy to achieve goals:
Metformin OR Agent(s) including COMBINATION therapy that provide adequate EFFICACY to achieve and maintain treatment goals
Prioritize avoidance of hypoglycemia in high-risk individuals
In general, higher efficacy approaches have greater likelihood of achieving glycemic goals
Efficacy for glucose lowering
Very High: Dulaglutide (high dose), Semaglutide, Tirzepatide
Insulin
Combination Oral, Combination Injectable (GLP-1 RA/Insulin)
High: GLP-1 RA (not listed above), Metformin, SGLT2i, Sulfonylurea, TZD
Intermediate: DPP-4i
Achievement and Maintenance of Weight Management Goals:
Set individualized weight management goals
General lifestyle advice: medical nutrition therapy/eating patterns/ physical activity
Intensive evidence-based structured weight management program
Consider medication for weight loss
Consider metabolic surgery
When choosing glucose-lowering therapies:
Consider regimen with high-to-very-high dual glucose and weight efficacy
Efficacy for weight loss
Very High: Semaglutide, Tirzepatide
High: Dulaglutide, Liraglutide
Intermediate: GLP-1 RA (not listed above), SGLT2i
Neutral: DPP-4i, Metformin
If additional cardiorenal risk reduction or glycemic lowering needed
If A1C above target



- Document the comorbidities using the overview section
  - Carries forward
  - Reminds you to assess if the correct cardiorenal medications are on board



p-Up
Order Review
findhelp Patient Profile
4.5 trulicity. Out 1 mo. Starting 0.75
Last updated: Today
Problem List
Visit Diagnoses
Diabetes mellitus, type 2 (HCC)
Details
Code: E11.9 Priority: Unprioritized Noted: 5/31/2019
Share w/ Pt
Overview
Edited: Levy, Natalie, MD 5/9/2024 6:32 PM
Uacr 217 max, last 129
GFR ranges 51 to >60
CAD 7/2022 Incidental finding on chest CT
Bladder Benign Tumor
Lisinopril Angioema
BMI 25.48
2023 Fib 4 1.08
2024 Pro BNP 148
Dexcom clarity share code
Current Assessment & Plan Note
Edited: Levy, Natalie, MD 5/9/2024 6:31 PM
Pharmacy / he has been out of trulicity 4.5mg weekly for 4 weeks but he started exercising and despite this his A1c went down. We talked about the power of exercise.
I called his pharmacy. Only the 0.75mg dose is available and they only have one box left (4 pens). They can't hold it for him.
Will resume trulicity but at 0.75mg. He called his hha from the exam room and the hha is going to go right how to pick it up.
Diet
Exercise
Resume trulicity 0.75 and cont metformin, jardiance, and glimepiride
Utd optho and pod
And vaccines
Allergies
Lisinopril Swelling
Succinylcholine
Medications
Prior Authorizations
Medications from outside sources need reconciliation.
Alcohol Swabs 70 % Pads
amLODIPine (NORVASC) 5 MG tablet
aspirin (BAYER) 81 MG chewable tablet
carboxymethylcellulose 0.5 % (REFRESH TEARS) 0.5 % ophthalmic solution
Continuous Glucose Sensor (DEXCOM G6 SENSOR) Misc
cyanocobalamin 1000 MCG tablet
dulaglutide (TRULICITY) 0.75 MG/0.5ML pen injector
empagliflozin (JARDIANCE) 25 MG tablet
ferrous sulfate (FERATAB) 325 (65 FE) MG tablet
glimepiride (AMARYL) 4 MG tablet
glucose blood strip
Lancets Misc
metFORMIN (GLUCOPHAGE) 1000 MG tablet
metoprolol succinate er (TOPROL XL) 25 MG 24 hr tablet
polyvinyl alcohol 1.4 % (LIQUIFILM TEARS) 1.4 % ophthalmic solution
rosuvastatin (CRESTOR) 20 MG tablet
Vitamin D, Cholecalciferol, (VITAMIN D3) 25 MCG (1000 UT) Cap capsule
Problem List
29 items
B12 deficiency
Bladder tumor



Problem List
Visit Diagnoses
BestPractice
Search for problem
Add
DxReference
Show:
Past Problems
Diagnosis
Resolved
Unprioritized
Type 2 diabetes mellitus with complication, without long-term current use of insulin
Details
Code: E11.8
Priority:
Unprioritized
Noted: 4/23/2019
Share w/ Pt:
Overview
Edited: Levy, Natalie, MD 5/14/2024 7:06 PM
Mild NPDR OU 10/2020
GFR >60
UACR 16
BMI 30
MASLD. 2023 Fib 4 = 2.48, 2023 Fibroscan S1 F1
Create Current Assessment & Plan Note
Last Assessment & Plan Note
Edited: Levy, Natalie, MD 2/15/2024 11:07 AM

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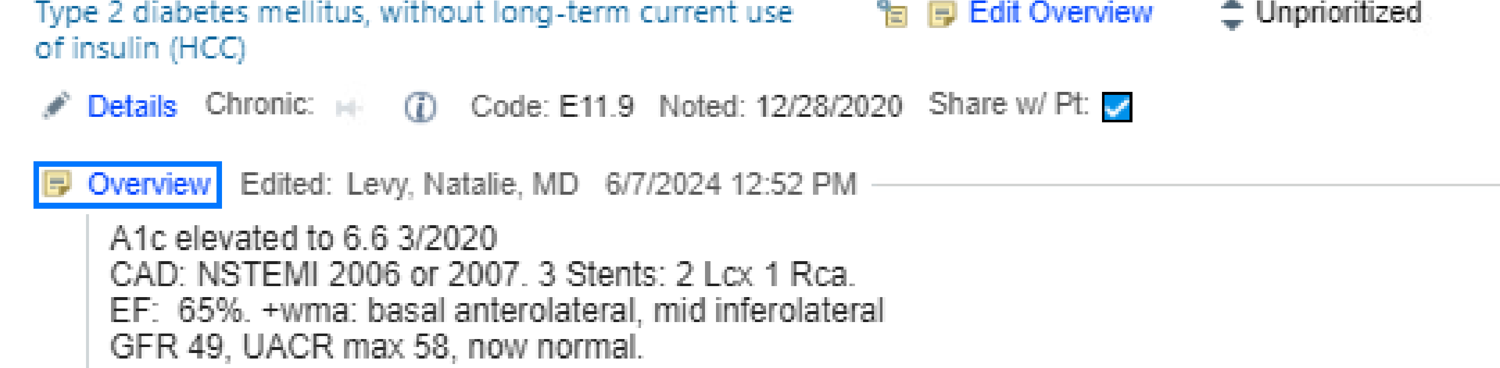
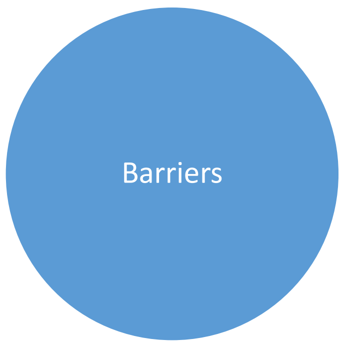


Type 2 diabetes mellitus, without long-term current use of insulin (HCC)
Edit Overview
Unprioritized
Details
Chronic:
Code: E11.9
Noted: 12/28/2020
Share w/ Pt:
Overview
Edited: Levy, Natalie, MD 6/7/2024 12:52 PM
A1c elevated to 6.6 3/2020
CAD: NSTEMI 2006 or 2007. 3 Stents: 2 Lcx 1 Rca.
EF: 65%. +wma: basal anterolateral, mid inferolateral
GFR 49, UACR max 58, now normal.
BMI 27

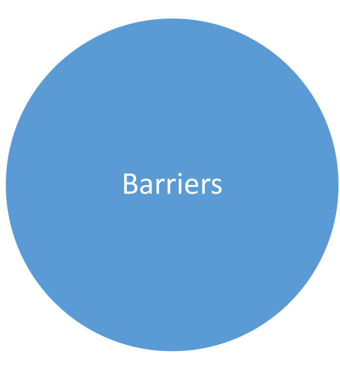
Things to Assess

- Patient awareness of disease state
- 3 Ways to treat T2DM:
  - Physical Activity
  - Dietary Choices
  - Medication
- Metric Snap Shot
- Comorbidities
- Barriers
- DM Health Care Maintenance



Barriers?

- Especially prompted to ask when I see long standing uncontrolled T2DM or a lot of missed visits
  - SDOH Barriers
    - Transportation
    - Time off from work
    - Food or Housing insecurity
    - Social isolation
    - Health literacy
  - Chronic Pain preventing physical activity
    - Rehab Medicine or Neurology or Pain Clinic needed?
  - Mental Health Challenges
    - Look at the PHQ2
    - Stress and Anxiety
    - (Unmotivated)



- Barriers?
- Refer to a teammate that can help
  - Community Health Workers
  - Social Workers
- Write the barrier down in the note
  - F/up on it next time

Things to Assess

- Patient awareness of disease state
- 3 Ways to treat T2DM:
  - Physical Activity
  - Dietary Choices
  - Medication
- Metric Snap Shot
- Comorbidities
- Barriers
- DM Health Care Maintenance

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- Vaccines
  - Pneumococcal
  - Influenza
  - Covid
- Retinal Screening
- Podiatry

Chart Review | Synopsis | Problem List | SnapShot | findhelp Patient Profile | Pre Epic Encounter | Report Viewer | Health Maintenance

Health Maintenance

Address Topic | Remove Override | Add Topic | Document Past Immunization | Edit Modifiers | Report | Refresh | H+H Guidelines

Topic	Due Date	Frequency	Date Completed	
Current Care Gaps				
A1C (MANAGEMENT)	Overdue since 4/11/2024	3 month(s)	1/11/2024 - H...	12/13/2
Upcoming				
NEPHROPATHY (eGFR, MICROALBUMIN)	Next due on 7/30/2024	1 year(s)	7/30/2023 - HHC ...	
HIV SCREENING	Next due on 2/1/2025	1 year(s)	2/1/2024 - HIV A...	8/20/2006
LIPID PANEL	Next due on 2/1/2025	1 year(s)	2/1/2024 - Multipl...	2/4/202
RETINOPATHY SCREEN	Next due on 3/26/2025	1 year(s)	3/26/2024 - Had ...	1/25/2024
TDAP/TD VACCINE	Next due on 4/17/2033	10 year(s)	4/17/2023 - TDa...	3/28/2013
COLORECTAL CANCER SCREENING (COLONOSCOPY - Pre...	Next due on 3/22/2034	10 year(s)	3/22/2024 - END...	3/22/2024
Completed or No Longer Recommended				
HEPATITIS C SCREENING	Tentatively Complete	Once	11/13/2020 - Hep...	
ABDOMINAL AORTIC ANEURYSM (AAA) SCREEN	Completed	Once	3/8/2022 - US Ab...	8/10/2021
ZOSTER (SHINGRIX) VACCINE	Completed	Imm Details	5/2/2022 - (shingl...	2/3/2022 -
PNEUMOCOCCAL 65+ YEARS VACCINE	Completed	Imm Details	9/20/2023 - PNE...	2/3/2022 -
INFLUENZA VACCINE	Completed	Imm Details	12/13/2023 - Influ...	10/27/2022
COVID VACCINE	Completed	Imm Details	1/5/2024 - Pfizer ...	11/18/2022
HEPATITIS B VACCINE	Aged Out	Imm Details		
HUMAN PAPILLOMA VIRUS (HPV) VACCINE	Aged Out	Imm Details		

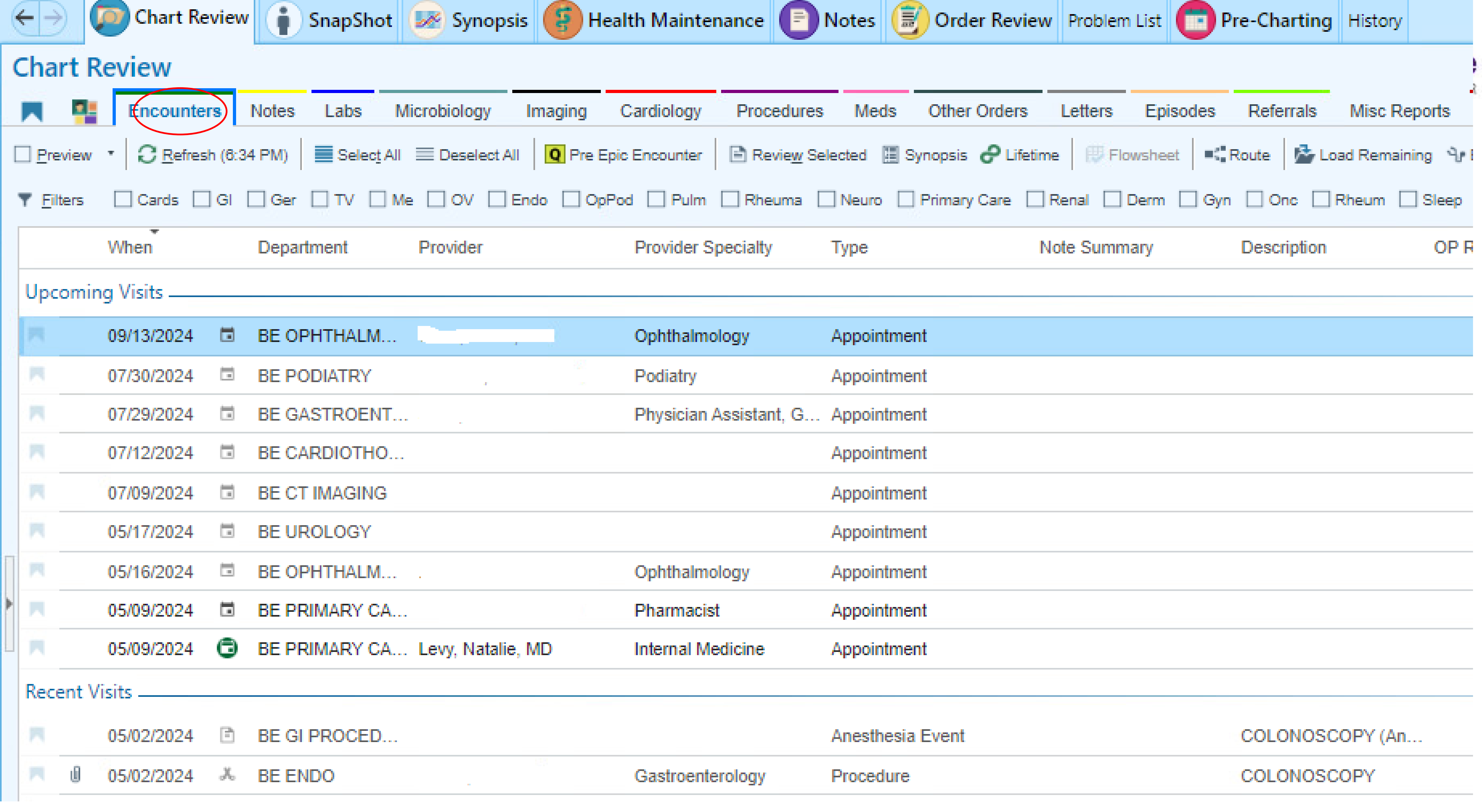

Chart Review
SnapShot
Synopsis
Health Maintenance
Notes
Order Review
Problem List
Pre-Charting
History
Chart Review
Encounters
Notes
Labs
Microbiology
Imaging
Cardiology
Procedures
Meds
Other Orders
Letters
Episodes
Referrals
Misc Reports
Preview
Refresh (6:34 PM)
Select All
Deselect All
Pre Epic Encounter
Review Selected
Synopsis
Lifetime
Flowsheet
Route
Load Remaining
Filters
Cards
GI
Ger
TV
Me
OV
Endo
OpPod
Pulm
Rheuma
Neuro
Primary Care
Renal
Derm
Gyn
Onc
Rheum
Sleep
When
Department
Provider
Provider Specialty
Type
Note Summary
Description
Upcoming Visits
09/13/2024 BE OPHTHALM... Ophthalmology Appointment
07/30/2024 BE PODIATRY Podiatry Appointment
07/29/2024 BE GASTROENT... Physician Assistant, G... Appointment
07/12/2024 BE CARDIOTHO... Appointment
07/09/2024 BE CT IMAGING Appointment
05/17/2024 BE UROLOGY Appointment
05/16/2024 BE OPHTHALM... Ophthalmology Appointment
05/09/2024 BE PRIMARY CA... Pharmacist Appointment
05/09/2024 BE PRIMARY CA... Levy, Natalie, MD Internal Medicine Appointment
Recent Visits
05/02/2024 BE GI PROCED... Anesthesia Event COLONOSCOPY (An...
05/02/2024 BE ENDO Gastroenterology Procedure COLONOSCOPY

Chart Review

Encounters | Notes | Labs | Microbiology | Imaging | Cardiology | Procedures | Meds | Other Orders | Letters | Episodes | Referrals | Misc Reports | Surgeries | Anesthesia Records

Preview | Refresh (6:36 PM) | Select All | Deselect All | Pre Epic Encounter | Review Selected | Synopsis | Lifetime | Flowsheet | Route | Load Remaining | Encounter | Add to Bookmarks | VOICE

Filters: Cards, GI, Ger, TV, Me, OV, Endo, ☑ OpPod, Pulm, Rheuma, Neuro, Primary Care, Renal, Derm, Gyn, Onc, Rheum, Sleep, CVS, GU, More | Clear Filters | +4 | On

When	Department	Provider	Provider Specialty	Type	Note Summary	Description	OP Reason for Visit	B...	Priv...	Account Number	CSN
Upcoming Visits											
09/13/2024	BE OPHTHALM...		Ophthalmology	Appointment							145455488
07/30/2024	BE PODIATRY		Podiatry	Appointment							148461983
05/16/2024	BE OPHTHALM...		Ophthalmology	Appointment							145455573
Recent Visits											
04/26/2024	BE PODIATRY		Podiatry	Office Visit		Type 2 diabetes mellit...			No		139810419
03/28/2024	BE OPHTHALM...		Nurse Practitioner, Op...	Orders Only		Combined forms of a...					145428900
03/28/2024	BE OPHTHALM...		Ophthalmology	Office Visit		Glaucoma suspect of ...	FOLLOW-UP		No		141732817
03/27/2024	BE OPHTHALM...		Ophthalmology	Orders Only							145326227
02/15/2024	BE OPHTHALM...		Ophthalmology	Office Visit		Suspected glaucoma ...			No		137674163
01/04/2024	BE OPHTHALM...		Ophthalmology	Office Visit		Cystoid macular ede...	FOLLOW-UP		No		137107380
12/27/2023	BE OPHTHALM...		Ophthalmology	Office Visit		Macular edema (Prim...	FOLLOW-UP		No		134609887
11/28/2023	BE OPHTHALM...		Ophthalmology	Procedure visit		Macular edema (Prim...			No		133522062
6 Months Ago											
09/28/2023	BE OPHTHALM...		Ophthalmology	Office Visit		Cystoid macular ede...			No		127279298
09/28/2023	BE OPHTHALM...		Ophthalmology	Orders Only							129479318
08/31/2023	BE OPHTHALM...		Ophthalmology	Office Visit		Cystoid macular ede...			No		123556520

ADD ORDER ADD DX (0) | PRINT AVS | SIGN V

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Chart Review

Encounters | Notes | Labs | Microbiology | Imaging | Cardiology | Procedures | Meds

Preview ▾ | Refresh (6:39 PM) | Select All | Deselect All | Pre Epic Encounter | Review Selected

Filters | Cards | GI | Ger | TV | Me | OV | Endo | OpPod | Pulm | Rheuma | Neuro

Appointment Status	Episode
Attachment Type	Medication
Chief Complaint	Primary Dx
✓ Department Specialty	Provider
Dx/Impressions	Order
Encounter Class	Home Care Contact Type
Encounter Department	Admissions/Outpatient
Encounter Type	Specialty (Department ...
Episode Linked Problem	Organization

Include | Exclude | Department Specialty contains...

	Department Specialty	Count	Last Date
☐	Neurology	20	04/03/2024
☑	Ophthalmology	57	09/13/2024
☐	Pediatric Urology	1	04/18/2021
☐	Pediatrics	1	09/04/2020
☐	Pharmacy	3	08/04/2023
☑	Podiatry	22	07/30/2024
☐	Pre-Admission Testing	8	01/04/2023
☐	Primary Care	208	05/09/2024

Save this Filter for Quick Access Later

Save as New Filter

Show encounters with start dates:

From: To:

When	Department
Upcoming Visits	
09/13/2024	BE OPHTHALM...
07/30/2024	BE PODIATRY
05/16/2024	BE OPHTHALM...
Recent Visits	
04/26/2024	BE PODIATRY
03/28/2024	BE OPHTHALM...
03/28/2024	BE OPHTHALM...
03/27/2024	BE OPHTHALM...
02/15/2024	BE OPHTHALM...
01/04/2024	BE OPHTHALM...
12/27/2023	BE OPHTHALM...
11/28/2023	BE OPHTHALM...
6 Months Ago	
09/28/2023	BE OPHTHALM...
09/28/2023	BE OPHTHALM...
08/31/2023	BE OPHTHALM...

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What did the ocean say to the shore?

Nothing... It just waved.

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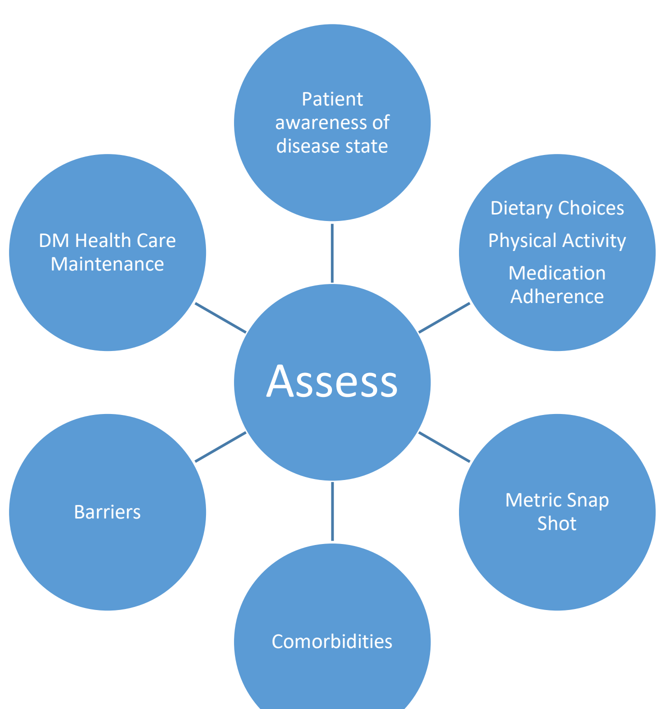
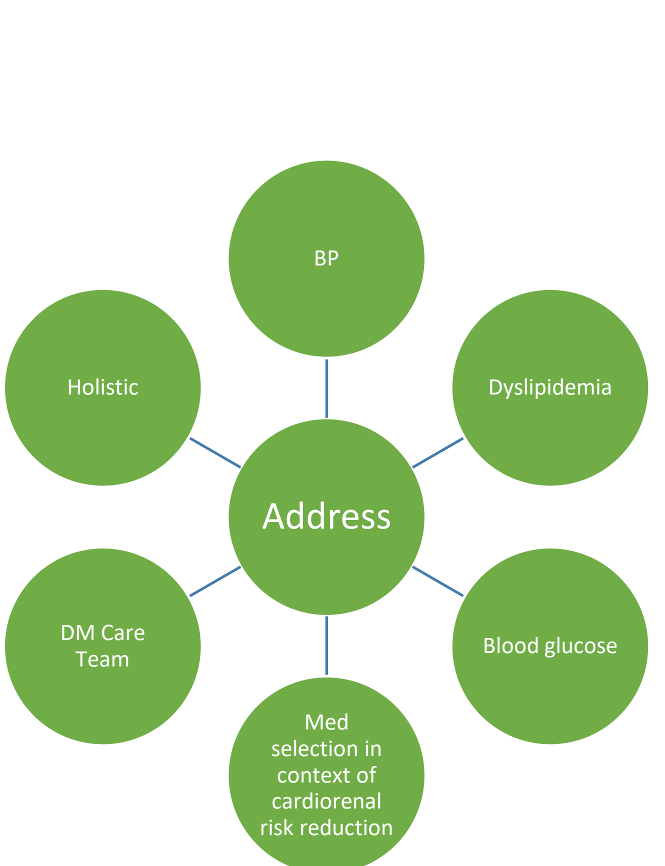
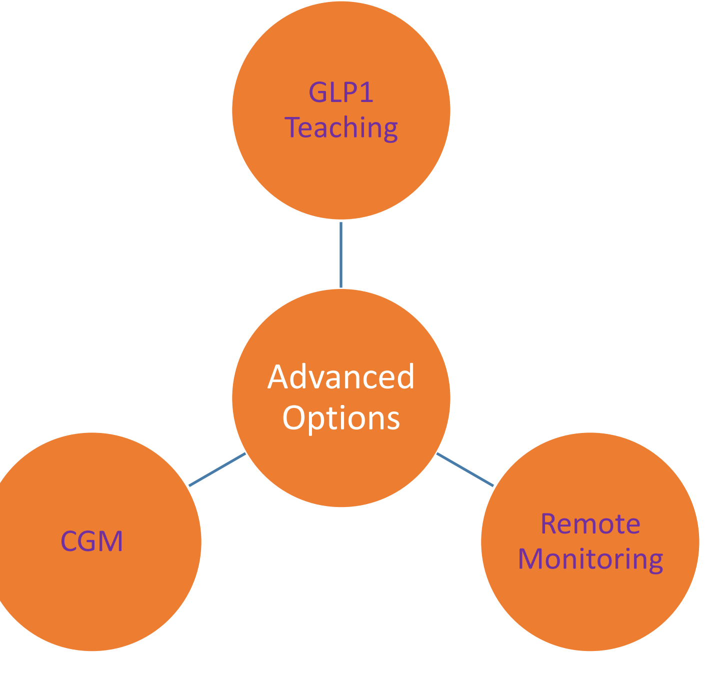

Patient awareness of disease state
DM Health Care Maintenance
Dietary Choices
Physical Activity
Medication Adherence
Assess
Barriers
Metric Snap Shot
Comorbidities


BP
Holistic
Dyslipidemia
Address
DM Care Team
Blood glucose
Med selection in context of cardiorenal risk reduction


GLP1 Teaching
Advanced Options
CGM
Remote Monitoring

NYC HEALTH+ HOSPITALS

Bellevue

BP

Holistic Support

Dyslipidemia

Address

DM Care Team

Blood glucose

Med selection in context of Cardiorenal risk reduction

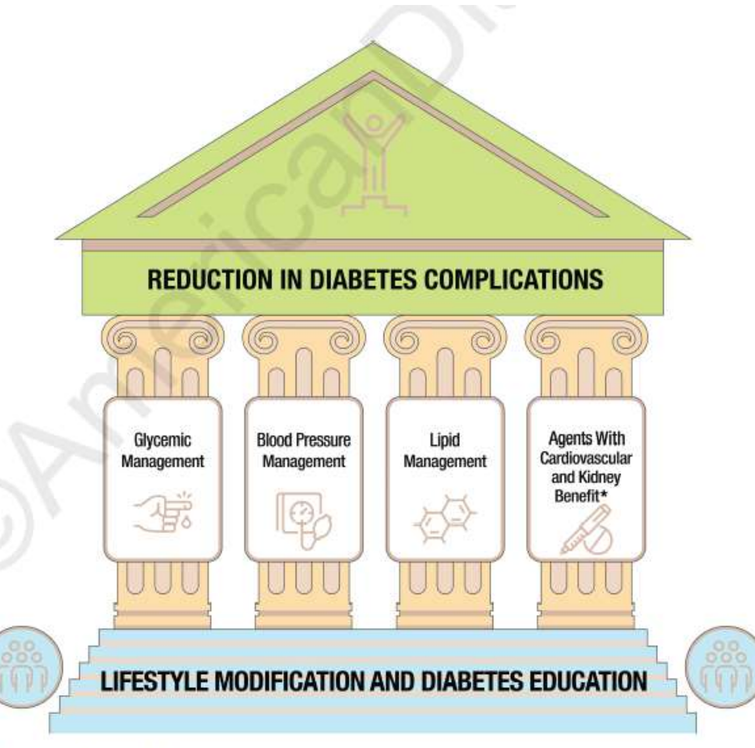
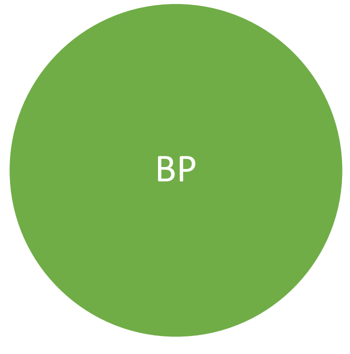


Figure 10.1—Multifactorial approach to reduction in risk of diabetes complications. *Risk reduction interventions to be applied as individually appropriate.



- BP: Definition and on Treatment Goal <130/80
  - Repeated measurement prior to diagnosis
  - I add the diagnosis to the problem list
  - I always 'treat' but often I start with lifestyle if very close to target

Recommendations

10.7 Individuals with confirmed office-based blood pressure ≥130/80 mmHg qualify for initiation and titration of pharmacologic therapy to achieve the recommended blood pressure goal of <130/80 mmHg. A

BP

Holistic Support
-CHW, SW, DCT
-smoking cessation

Dyslipidemia

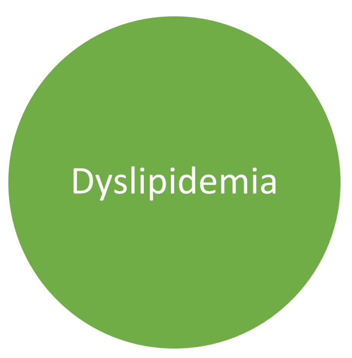
Address

DM Care Team

Blood glucose

Med selection in context of Cardiorenal risk reduction

- LDL Goals
  - "Moderate / 70 / 55 "
  - Primary Prevention
    - T2DM and 40-75 yo: moderate intensity statin
    - T2DM, 40-75 yo, higher ASCVD risk / ≥1 additional ASCVD RF: high intensity statin, LDL <70, drop ≥50%
  - Secondary Prevention
    - T2DM and hx ASCVD: high intensity statin, LDL <55, drop ≥50%



STATIN TREATMENT

Primary Prevention

Recommendations

10.18 For people with diabetes aged 40–75 years without ASCVD, use moderate-intensity statin therapy in addition to lifestyle therapy. A

10.20 For people with diabetes aged 40–75 years at higher cardiovascular risk, including those with one or more ASCVD risk factors, it is recommended to use high-intensity statin therapy to reduce LDL cholesterol by ≥50% of baseline and to target an LDL cholesterol goal of <70 mg/dL (<1.8 mmol/L). A

Secondary Prevention

Recommendations

10.26 For people of all ages with diabetes and ASCVD, high-intensity statin therapy should be added to lifestyle therapy. A

10.27 For people with diabetes and ASCVD, treatment with high-intensity statin therapy is recommended to target an LDL cholesterol reduction of ≥50% from baseline and an LDL cholesterol goal of <55 mg/dL (<1.4 mmol/L). Addition of ezetimibe or a PCSK9 inhibitor with proven benefit in this population is recommended if this goal is not achieved on maximum tolerated statin therapy. B

Address

- BP
- Dyslipidemia
- Blood glucose
- Med selection in context of Cardiorenal risk reduction
- DM Care Team
- Holistic Support

Blood Glucose Goals

- Self monitoring glucose
  - Fasting 80-130
  - Post prandial <180
  - Prior to the next meal <130
- A1c
  - Population Health Goal <8%
  - For some <7%
  - Individualize
- Time in Range (CGM)
  - Population Health Goal >50%
  - For some >70%
  - Individualize

Address

- BP
- Dyslipidemia
- Blood glucose
- Med selection in context of Cardiorenal risk reduction
- DM Care Team
- Holistic Support
  - -CHW, SW, DCT
  - -smoking cessation

THE JOURNAL OF CLINICAL AND APPLIED RESEARCH AND EDUCATION

Diabetes Care®

JANUARY 2024 | VOLUME 47 | SUPPLEMENT 1

WWW.DIABETESJOURNALS.ORG/CARE

Standards of Care in Diabetes—2024

USE OF GLUCOSE-LOWERING MEDICATIONS IN THE MANAGEMENT OF TYPE 2 DIABETES

HEALTHY LIFESTYLE BEHAVIORS; DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT (DSMES); SOCIAL DETERMINANTS OF HEALTH (SDOH)

Goal: Cardiorenal Risk Reduction in High-Risk Individuals with Type 2 Diabetes (in addition to comprehensive CV risk management)*

+ASCVD†
Defined differently across CVOTs but all included individuals with established CVD (e.g., MI, stroke, any revascularization procedure). Variably included: conditions such as transient ischemic attack, unstable angina, amputation, symptomatic or asymptomatic coronary artery disease.

+Indicators of high risk
While definitions vary, most comprise ≥55 years of age with two or more additional risk factors (including obesity, hypertension, smoking, dyslipidemia, or albuminuria)

+ASCVD/Indicators of High Risk
- GLP-1 RA# with proven CVD benefit
- EITHER/OR
- SGLT2i§ with proven CVD benefit

If A1C above target

- For patients on a GLP-1 RA, consider adding SGLT2i with proven CVD benefit or vice versa
- TZD^

+HF
Current or prior symptoms of HF with documented HFrEF or HFpEF

+HF
SGLT2i§ with proven HF benefit in this population

+CKD
eGFR <60 mL/min per 1.73 m² OR albuminuria (ACR ≥3.0 mg/mmol [30 mg/g]). These measurements may vary over time; thus, a repeat measure is required to document CKD.

+CKD (on maximally tolerated dose of ACEi/ARB)

PREFERABLY
SGLT2i§ with primary evidence of reducing CKD progression
Use SGLT2i in people with an eGFR ≥20 mL/min per 1.73 m²; once initiated should be continued until initiation of dialysis or transplantation
OR
GLP-1 RA with proven CVD benefit if SGLT2i not tolerated or contraindicated

If A1C above target, for patients on SGLT2i, consider incorporating a GLP-1 RA or vice versa

If additional cardiorenal risk reduction or glycemic lowering needed

Goal: Achievement and Maintenance of Glycemic and Weight Management Goals

Glycemic Management: Choose approaches that provide the efficacy to achieve goals:
Metformin OR Agent(s) including COMBINATION therapy that provide adequate EFFICACY to achieve and maintain treatment goals
Prioritize avoidance of hypoglycemia in high-risk individuals

In general, higher efficacy approaches have greater likelihood of achieving glycemic goals

Efficacy for glucose lowering
- **Very High:** Dulaglutide (high dose), Semaglutide, Tirzepatide; Insulin; Combination Oral, Combination Injectable (GLP-1 RA/Insulin)
- **High:** GLP-1 RA (not listed above), Metformin, SGLT2i, Sulfonylurea, TZD
- **Intermediate:** DPP-4i

Achievement and Maintenance of Weight Management Goals:
Set individualized weight management goals
- General lifestyle advice: medical nutrition therapy/eating patterns/physical activity
- Intensive evidence-based structured weight management program
- Consider medication for weight loss
- Consider metabolic surgery

When choosing glucose-lowering therapies:
Consider regimen with high-to-very-high dual glucose and weight efficacy

Efficacy for weight loss
- **Very High:** Semaglutide, Tirzepatide
- **High:** Dulaglutide, Liraglutide
- **Intermediate:** GLP-1 RA (not listed above), SGLT2i
- **Neutral:** DPP-4i, Metformin

If A1C above target

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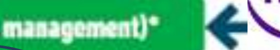

Goal: Cardiorenal Risk Reduction in High-Risk Individuals with Type 2 Diabetes (in addition to comprehensive CV risk management)*

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Defined differently across CVOTs but all included individuals with established CVD (e.g., MI, stroke, any revascularization procedure). Variably included: conditions such as transient ischemic attack, unstable angina, amputation, symptomatic or asymptomatic coronary artery disease.

+Indicators of high risk

While definitions vary, most comprise ≥55 years of age with two or more additional risk factors (including obesity, hypertension, smoking, dyslipidemia, or albuminuria)

+ASCVD/Indicators of High Risk

GLP-1 RA# with proven CVD benefit — EITHER/OR — SGLT2i§ with proven CVD benefit

If A1C above target

- For patients on a GLP-1 RA, consider adding SGLT2i with proven CVD benefit or vice versa
- TZD^

+HF

Current or prior symptoms of HF with documented HFrEF or HFpEF

+HF

SGLT2i§ with proven HF benefit in this population

+CKD

eGFR <60 mL/min per 1.73 m² OR albuminuria (ACR ≥3.0 mg/mmol [30 mg/g]). These measurements may vary over time; thus, a repeat measure is required to document CKD.

+CKD (on maximally tolerated dose of ACEi/ARB)

PREFERABLY

SGLT2i§ with primary evidence of reducing CKD progression

Use SGLT2i in people with an eGFR ≥20 mL/min per 1.73 m²; once initiated should be continued until initiation of dialysis or transplantation

OR

GLP-1 RA with proven CVD benefit if SGLT2i not tolerated or contraindicated

If A1C above target, for patients on SGLT2i, consider incorporating a GLP-1 RA or vice versa

Med selection in context of Cardiorenal risk reduction

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Glycemic Management: Choose approaches that provide the efficacy to achieve goals:

Metformin OR Agent(s) including COMBINATION therapy that provide adequate EFFICACY to achieve and maintain treatment goals

Prioritize avoidance of hypoglycemia in high-risk individuals

In general, higher efficacy approaches have greater likelihood of achieving glycemic goals

Efficacy for glucose lowering

Very High:
Dulaglutide (high dose), Semaglutide, Tirzepatide

Insulin

Combination Oral, Combination Injectable (GLP-1 RA/Insulin)

High:
GLP-1 RA (not listed above), Metformin, SGLT2i, Sulfonylurea, TZD

Intermediate:
DPP-4i

Achievement and Maintenance of Weight Management Goals:

Set individualized weight management goals

General lifestyle advice: medical nutrition therapy/eating patterns/ physical activity

Intensive evidence-based structured weight management program

Consider medication for weight loss

Consider metabolic surgery

When choosing glucose-lowering therapies:
Consider regimen with high-to-very-high dual glucose and weight efficacy

Efficacy for weight loss

Very High:
Semaglutide, Tirzepatide

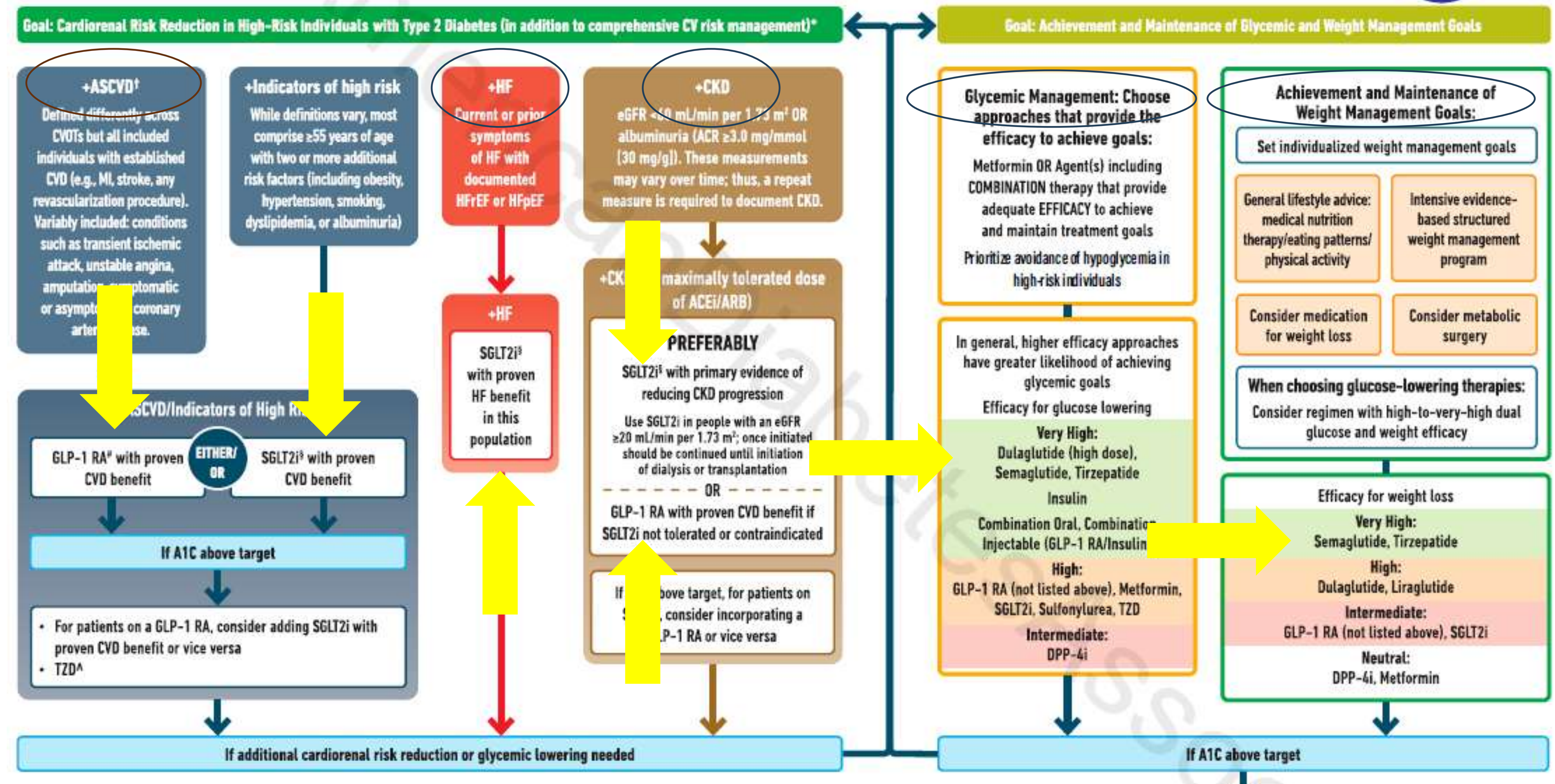
High:
Dulaglutide, Liraglutide

Intermediate:
GLP-1 RA (not listed above), SGLT2i

Neutral:
DPP-4i, Metformin

Med selection in context of Cardiorenal risk reduction

USE OF GLUCOSE-LOWERING MEDICATIONS IN THE MANAGEMENT OF TYPE 2 DIABETES



USE OF GLUCOSE-LOWERING MEDICATIONS IN THE MANAGEMENT OF TYPE 2 DIABETES

HEALTHY LIFESTYLE BEHAVIORS; DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT (DSMES); SOCIAL DETERMINANTS OF HEALTH (SDOH)

Goal: Cardiorenal Risk Reduction in High-Risk Individuals with Type 2 Diabetes (in addition to comprehensive CV risk management)*

+ASCVD†
Defined differently across CVOTs but all included individuals with established CVD (e.g., MI, stroke, any revascularization procedure). Variably included: conditions such as transient ischemic attack, unstable angina, amputation, symptomatic or asymptomatic coronary artery disease.

+Indicators of high risk
While definitions vary, most comprise ≥55 years of age with two or more additional risk factors (including obesity, hypertension, smoking, dyslipidemia, or albuminuria)

+ASCVD/Indicators of High Risk
- GLP-1 RA# with proven CVD benefit — EITHER/OR — SGLT2i§ with proven CVD benefit
- If A1C above target
- For patients on a GLP-1 RA, consider adding SGLT2i with proven CVD benefit or vice versa
- TZD^

+HF
Current or prior symptoms of HF with documented HFrEF or HFpEF

+HF
SGLT2i§ with proven HF benefit in this population

+CKD
eGFR <60 mL/min per 1.73 m^2 OR albuminuria (ACR ≥3.0 mg/mmol [30 mg/g]). These measurements may vary over time; thus, a repeat measure is required to document CKD.

+CKD (on maximally tolerated dose of ACEi/ARB)

PREFERABLY
SGLT2i§ with primary evidence of reducing CKD progression

Use SGLT2i in people with an eGFR ≥20 mL/min per 1.73 m^2; once initiated should be continued until initiation of dialysis or transplantation

OR

GLP-1 RA with proven CVD benefit if SGLT2i not tolerated or contraindicated

If A1C above target, for patients on SGLT2i, consider incorporating a GLP-1 RA or vice versa

If additional cardiorenal risk reduction or glycemic lowering needed

Goal: Achievement and Maintenance of Glycemic and Weight Management Goals

Glycemic Management: Choose approaches that provide the efficacy to achieve goals:
Metformin OR Agent(s) including COMBINATION therapy that provide adequate EFFICACY to achieve and maintain treatment goals

Prioritize avoidance of hypoglycemia in high-risk individuals

In general, higher efficacy approaches have greater likelihood of achieving glycemic goals

Efficacy for glucose lowering

- **Very High:** Dulaglutide (high dose), Semaglutide, Tirzepatide; Insulin; Combination Oral, Combination Injectable (GLP-1 RA/Insulin)
- **High:** GLP-1 RA (not listed above), Metformin, SGLT2i, Sulfonylurea, TZD
- **Intermediate:** DPP-4i

Achievement and Maintenance of Weight Management Goals:

Set individualized weight management goals

- General lifestyle advice: medical nutrition therapy/eating patterns/physical activity
- Intensive evidence-based structured weight management program
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When choosing glucose-lowering therapies:
Consider regimen with high-to-very-high dual glucose and weight efficacy

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If A1C above target

Med selection in context of Cardiorenal risk reduction

- Flow Trial NEJM May 24, 2024
- 3500 pts; Albuminuric DKD
- Semaglutide 1mg –vs- Placebo
- Decreased
  - CV Death
  - Decreased CKD Progression

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Effects of Semaglutide on Chronic Kidney Disease in Patients with Type 2 Diabetes

Vlado Perkovic, M.B., B.S., Ph.D., Katherine R. Tuttle, M.D., Peter Rossing, M.D., D.M.Sc., Kenneth W. Mahaffey, M.D., Johannes F.E. Mann, M.D., George Bakris, M.D., Florian M.M. Baeres, M.D., Thomas Idorn, M.D., Ph.D., Heidrun Bosch-Traberg, M.D., Nanna Leonora Lausvig, M.Sc., and Richard Pratley, M.D., for the FLOW Trial Committees and Investigators*

Table 2. Efficacy and Safety Outcomes.*

Outcome	Semaglutide (N=1767)	Placebo (N=1766)	Hazard Ratio (95% CI)	Estimated Difference (95% CI)
Primary outcome: major kidney disease events — no. (%)†	331 (18.7)	410 (23.2)	0.76 (0.66 to 0.88)	—
Components of primary outcome — no. (%)				
Persistent ≥50% reduction from baseline in eGFR	165 (9.3)	213 (12.1)	0.73 (0.59 to 0.89)	—
Persistent eGFR <15 ml/min/1.73 m^2	92 (5.2)	110 (6.2)	0.80 (0.61 to 1.06)	—
Initiation of kidney-replacement therapy	87 (4.9)	100 (5.7)	0.84 (0.63 to 1.12)	—
Death from kidney-related causes	5 (0.3)	5 (0.3)	0.97 (0.27 to 3.49)	—
Death from cardiovascular causes	123 (7.0)	169 (9.6)	0.71 (0.56 to 0.89)	—
Composite of kidney-specific components of the primary outcome	218 (12.3)	260 (14.7)	0.79 (0.66 to 0.94)	—

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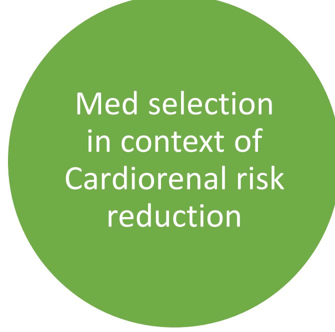
©American Diabetes Association

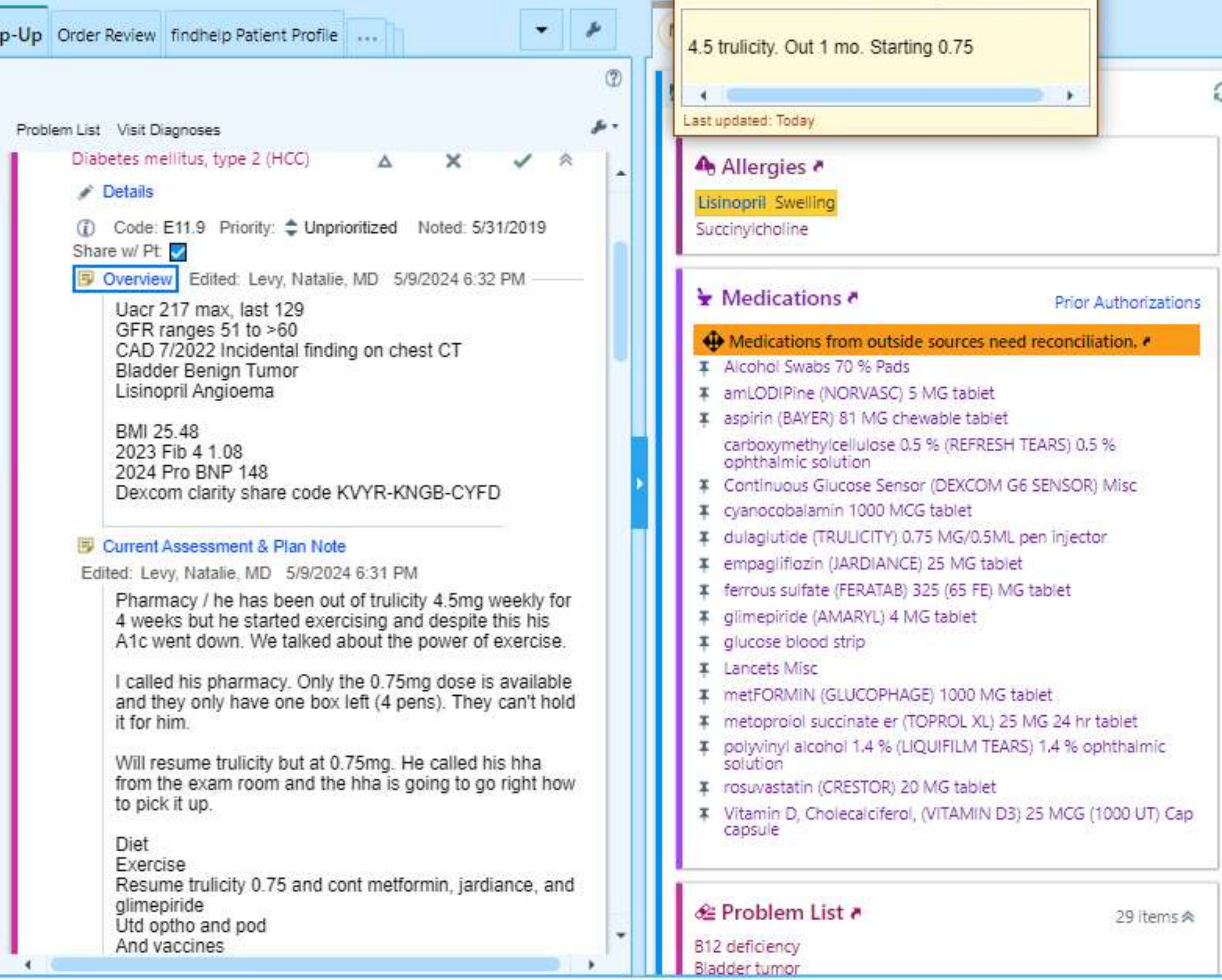


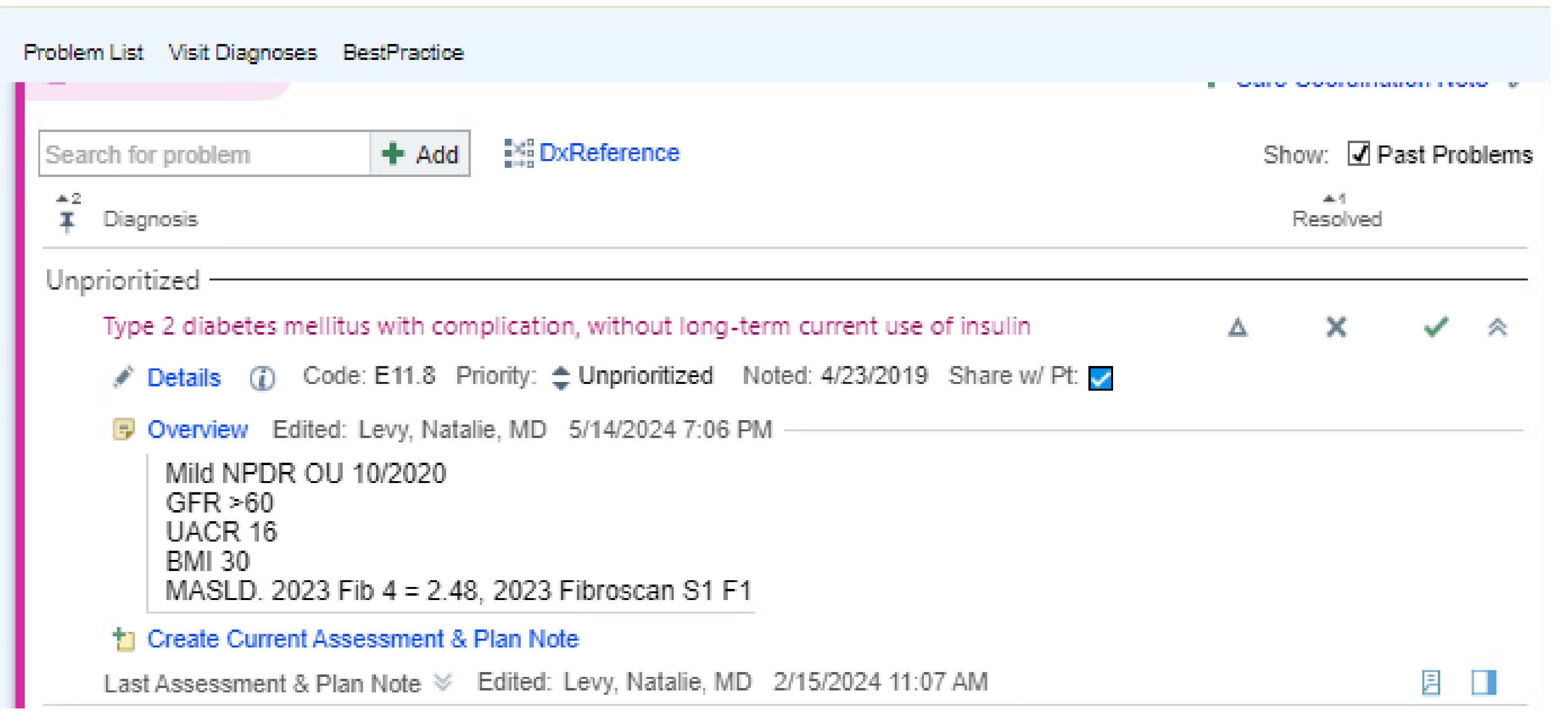
- Finerenone
  - Non-steroidal mineralocorticoid receptor antagonist
  - Fibrosis and inflammation
  - Fidelio and Figaro (NEJM)
    - In the trials- only ~5% on SGLT2i
    - I've not yet written for it….I would use it in patients with
      - Albuminuric DKD
      - Despite
        - Max tolerated Ace/Arb
        - And on an SGLT2i
        - Still with significant proteinuria
      - With an acceptable K $\leq$5 and GFR $\geq$25
      - Not yet with unacceptable polypharmacy
      - Willing to come back for labs in 1-2 weeks

10.43 For individuals with type 2 diabetes and chronic kidney disease with albuminuria treated with maximum tolerated doses of ACE inhibitor or ARB, addition of finerenone is recommended to improve cardiovascular outcomes and reduce the risk of chronic kidney disease progression. A

10.45d In individuals with type 2 diabetes and diabetic kidney disease, finerenone is recommended to reduce the risk of hospitalization for heart failure. A

Med selection in context of Cardiorenal risk reduction





Type 2 diabetes mellitus, without long-term current use of insulin (HCC)

Edit Overview

Unprioritized

Details Chronic: Code: E11.9 Noted: 12/28/2020 Share w/ Pt:

Overview Edited: Levy, Natalie, MD 6/7/2024 12:52 PM

A1c elevated to 6.6 3/2020
CAD: NSTEMI 2006 or 2007. 3 Stents: 2 Lcx 1 Rca.
EF: 65%. +wma: basal anterolateral, mid inferolateral
GFR 49, UACR max 58, now normal.
BMI 27

Med selection in context of Cardiorenal risk reduction

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If A1C above target

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BP

Holistic Support

Dyslipidemia

Address

DM Care Team

Blood glucose

Med selection in context of Cardiorenal risk reduction

- DM Nursing Team
- Pharm D Team
- Nutritionist

- DM Nursing Team
  - Diabetes Education
  - Lifestyle support
  - Medication Adherence Challenges
  - Glucometer Teaching
  - How to use a DM Med Pen
  - How to use a CGM
- Pharm D Team
- Nutrition Counseling

- DM Nursing Team
- Pharm D Team
  - Medication Titration
  - CGM Logistics
- Nutrition Counseling

- DM Nursing Team
- Pharm D Team
- Nutrition Counseling
  - Nutritionist
    - Group visits: English and Spanish
    - Individual visits: Any language

Address

- BP
- Dyslipidemia
- Blood glucose
- Med selection in context of Cardiorenal risk reduction
- DM Care Team
- Holistic Support

- CHW and SW
  - Referrals
  - Same Day Connection
    - CHW: Warm Hand Offs
    - SW have walk in policy
- Depression Care Team
  - Referral
  - Psychiatric NP and SW, Supervising psychiatrist
- Smoking Cessation
  - Referrals
  - NRT available in clinic

Bellevue

Why did the scarecrow win an award?

Because he was
outstanding in his field.

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HEALTH+
HOSPITALS
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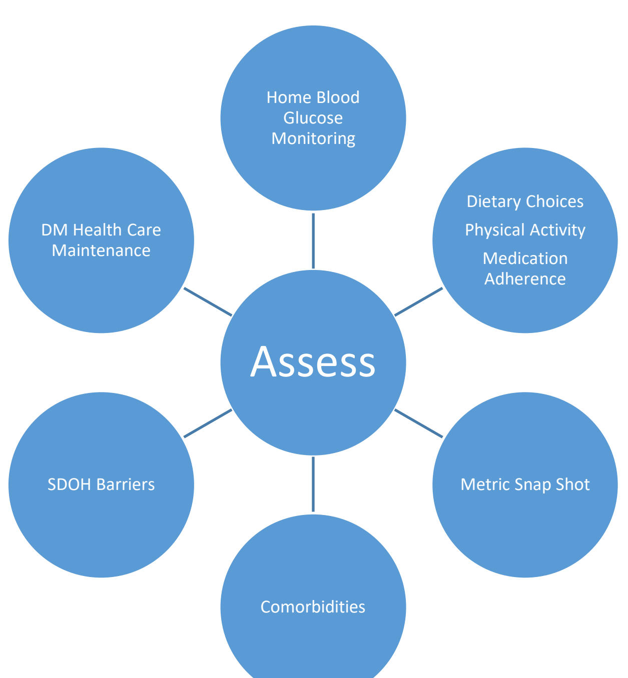
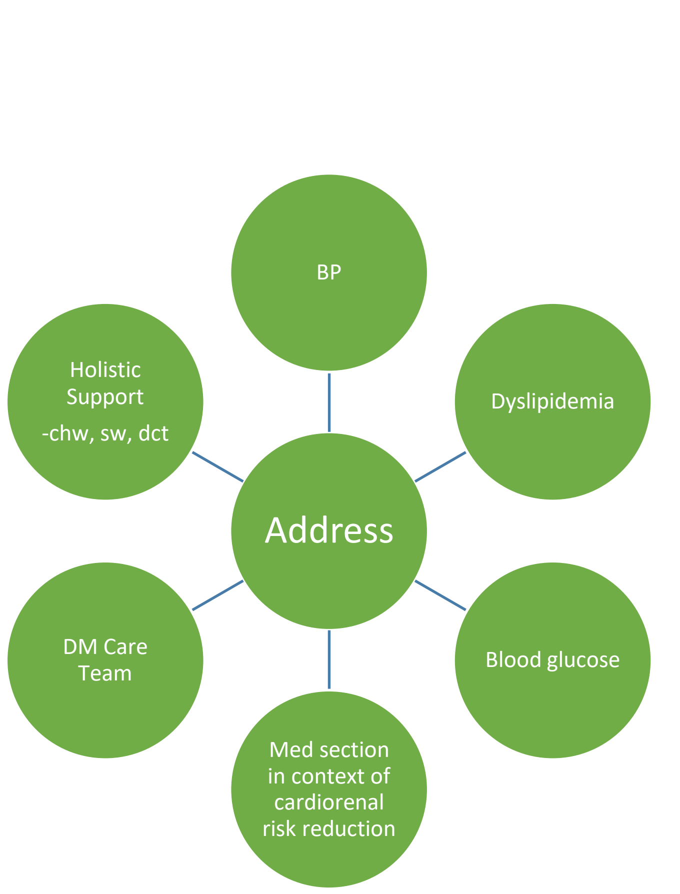
NYU School of Medicine
NYU LANGONE MEDICAL CENTER


Home Blood Glucose Monitoring
DM Health Care Maintenance
Dietary Choices
Physical Activity
Medication Adherence
Assess
SDOH Barriers
Metric Snap Shot
Comorbidities


BP
Holistic Support
-chw, sw, dct
Dyslipidemia
Address
DM Care Team
Blood glucose
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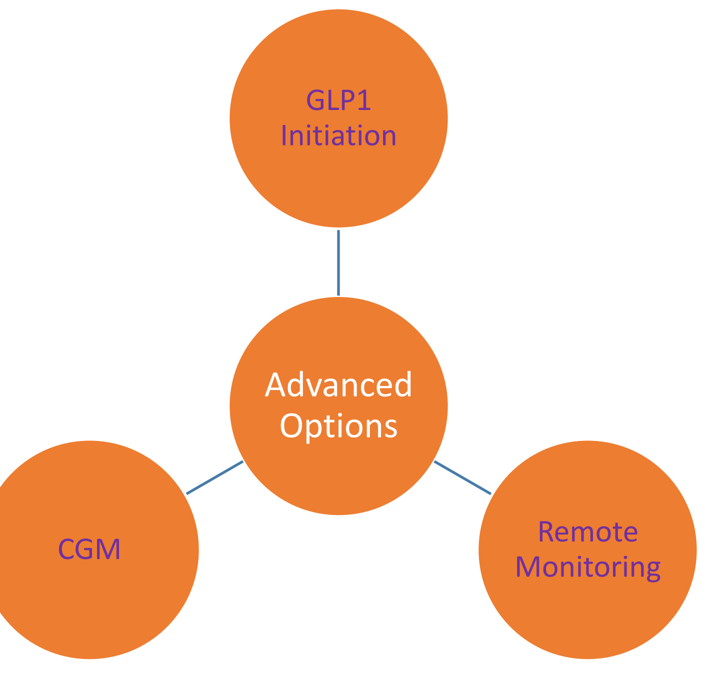
GLP1 Initiation
Advanced Options
CGM
Remote Monitoring

Bellevue

GLP1 Initiation

Advanced options

CGM

Remote Monitoring

GLP1 Initiation

Advanced options

CGM

Remote Monitoring

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GLP1
Initiation

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GLP1
Initiation

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- Challenging!
- PCP - Patient
- Conversations with patients
  - Health Benefits
  - Show the demo pens: compact device, tiny needle. Not formal teaching but ‘buy in’
  - Stop DPP4i based meds
  - Lifestyle modifications
- Ensure coverage
- Ensure availability

- Challenging!
- DM Team– Patient
- Teaching / Support
  - Needles
  - Injection technique
  - Storage
  - Side effects
  - Lifestyle modifications
  - Emotional Support
  - Titration

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GLP1
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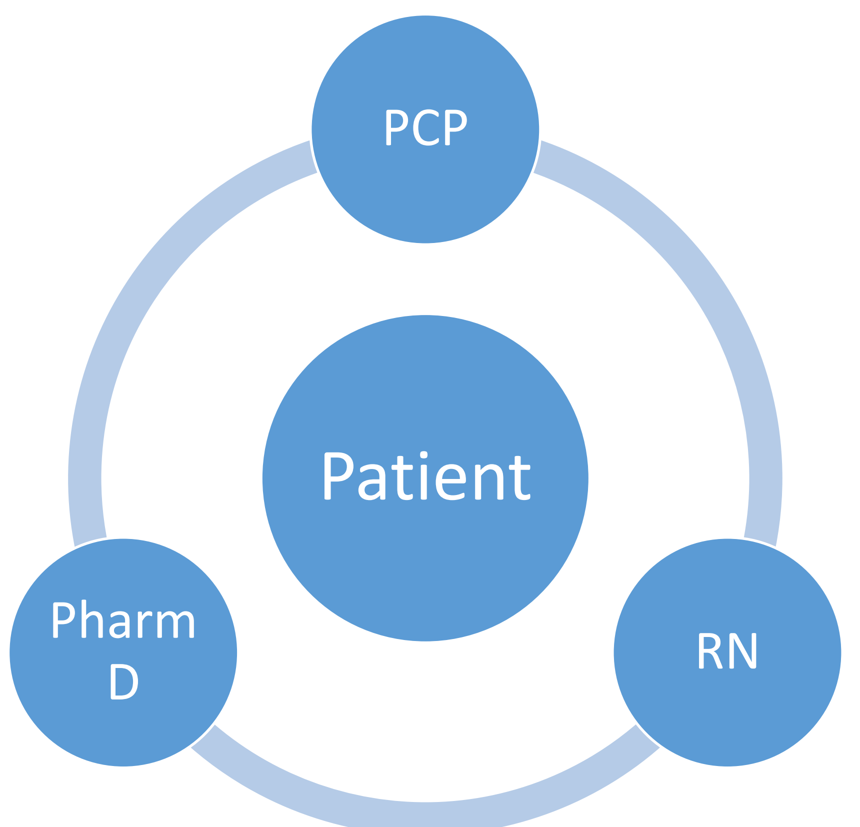
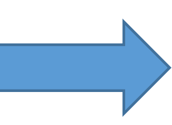

PCP
Patient
Pharm
D
RN

PCP advises on GLP1

Script sent to pharmacy

Call to confirm covered and available

Patient advised their job is to get the pen and wait to be contacted



PCP sends 2 referrals

At the same time

DM Nursing Team:

Please see for GLP1 injection teaching

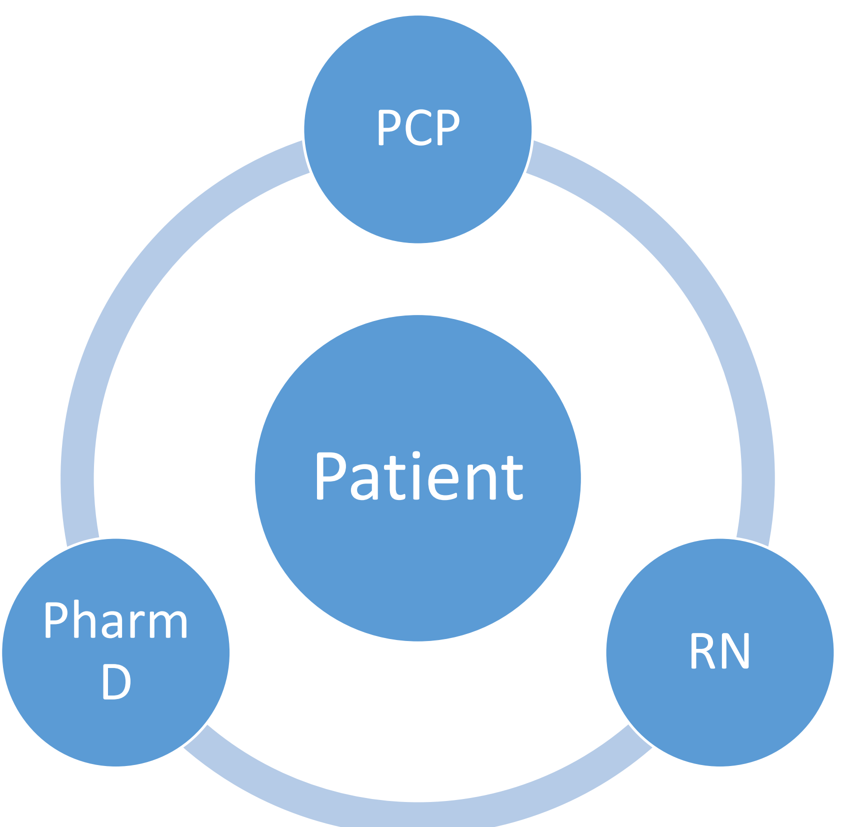
1. First dose in-person
2. Second dose: Televisit in 1 week

Pharm D

Please see for tolerability and titration

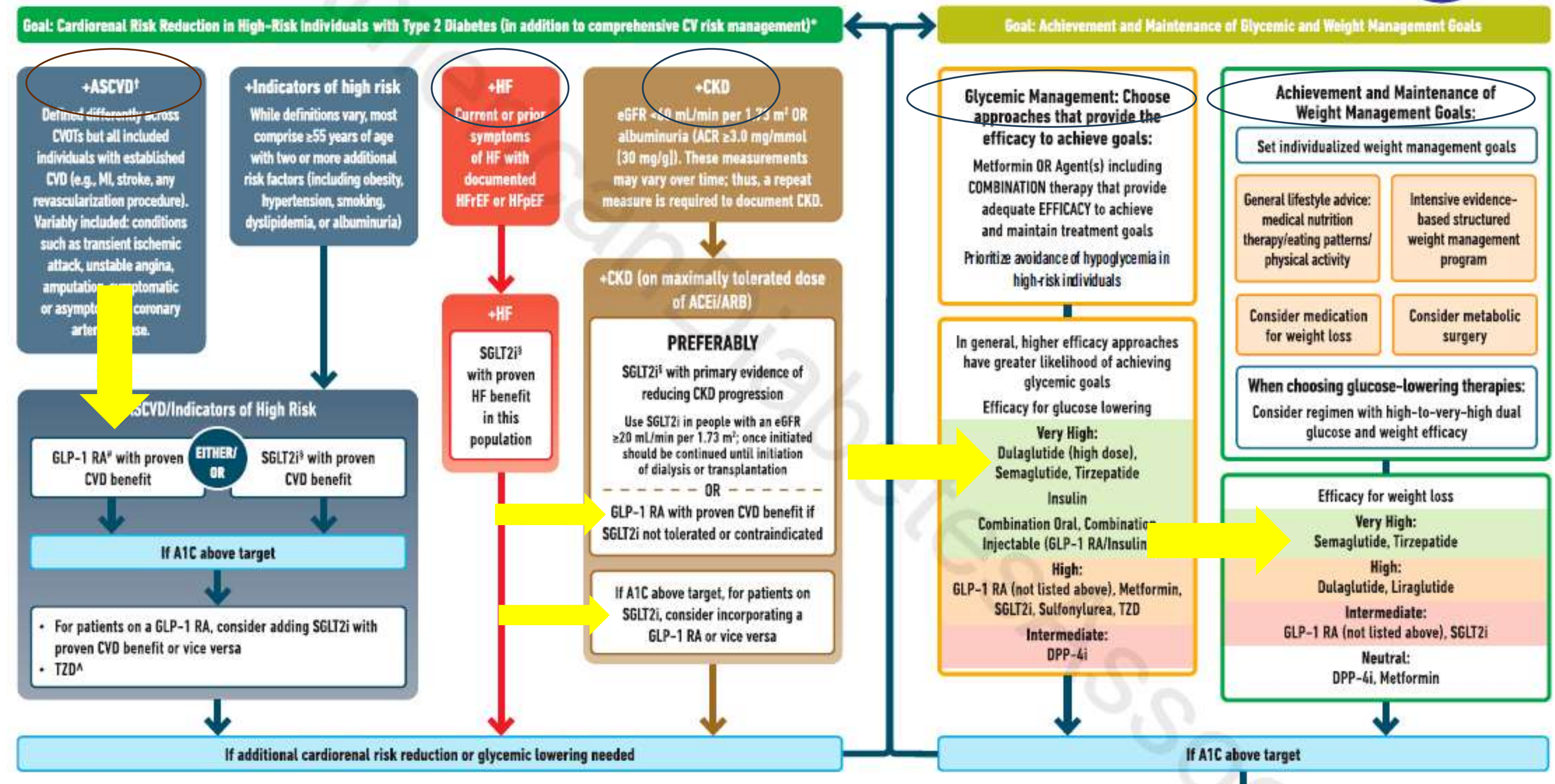
Time= 0 week

Time= 12 weeks



Time= 4 weeks
Time= 8 weeks

Time= 1 +2 weeks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TO AVOID THERAPEUTIC INERTIA REASSESS AND MODIFY TREATMENT REGULARLY (3-6 MONTHS)
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GLP1 Initiation

Advanced options

CGM

Remote Monitoring

- Remote Titration Programs
- Support patients using injectable medications
- Technology available to our safety net patients
  - Daily SMS Text messages
  - Weekly phone calls
- Team based approach
- MITI and MITI-GLP1

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- MITI = Mobile Insulin Titration Intervention
- Titration of Basal Insulin
- Patients with *uncontrolled* T2DM
- Enrolled on Lumeon Platform
  - Daily weekday text message
- RNs
  - Daily: check for alarm values
  - Weekly: titration phone call
  - Pre-signed algorithm; don't have to precept
- Flow
  - Collect info: Text
  - Give info: Phone call
  - Text message: efficient, therapeutic
- Goal: Fasting Blood Sugar <130
- Maximum time in the program: 12 weeks

MITI Program

NYU School of Medicine
CENTER

PATIENT DETAILS

Name:
Enrollment Date:
MR Number:
Phone no.
Patient Language:

MITI DETAILS

Starting A1c: 10.0 on 12/14/2023
Starting GFR: >= 60
Starting BMI: 34.73 on 12/14/2023
Insulin Brand at Enrollment: Basaglar
Delivery Method: Pen
Program: MITI
GLP1 Brand at Enrollment: "tried Ozempic but has a lot of side effects and stopped it"
MITI Preferred Titration Call Time: "Anytime"

MESSAGE DETAILS

Contact Time: 08:00
Last Msg Sent: 02/15/24 08:02

Weekly Values | **Weekly Call Log** | **Algorithm** | **Copy Call Log to Epic** | **Copy Graduation Info to Epic**

Week	Call Date	Current Dose (Insulin)	Current Dose (GLP-1)	Fr	Mo	Tu	We	Th	Change by (Insulin)	New Total Dose (Insulin)	Change by (GLP-1)	New Total Dose (GLP-1)	Trans-lator	Call Completed?
1								217						
2	12/28/23	22	na	177		213	195	217	+3	25	na	na	No	Yes
3	01/04/24	25	na	205		205	205	186	+4	29	na	na	N/A	Yes
4	01/11/24	29	na	155	207	178	157	187	+3	32	na	na	No	Yes
5*	01/18/24	32	na	174		168	185	182	+3	35	na	na	No	Yes
6	01/25/24	35	na	162	157	152	160	159	+3	38	na	na	No	Yes
7	02/01/24	38	na	149	156	153	139	151	0	38	na	na	No	Yes
8	02/08/24	40	na	148	142	157	150	151	+2	42	na	na	No	Yes
9	02/15/24	40	na	121		115	120	118	0	40	na	na	No	Yes
10														
11														

- MITI-GLP1 (Pilot)
- People with *well-controlled* T2DM
  - On basal insulin
  - Not on a GLP1 or on a sub max dose
- Transition them from insulin to a GLP1
  - Both classes lower blood sugar
  - GLP1s
    - Avoid hypoglycemia
    - Weight Loss
    - ASCVD Benefits

9.23 In adults with type 2 diabetes, a GLP-1 RA, including a dual glucose-dependent insulinotropic polypeptide (GIP) and GLP-1 RA, is preferred to insulin (**Fig. 9.4**). A

Remote Monitoring

- Goals
  - Max the GLP1
  - Minimize the Insulin
  - Avoid hypoglycemia
- MITI-GLP1 Workflow
  - Enrolled on the Lumeon Platform
  - Daily Text
  - Weekly Phone call
  - Nurses *do* precept these cases
  - Continues until: max tolerated GLP1 dose or 16 wks

PATIENT DETAILS

Name:
Enrollment Date:
MR Number
Phone no.:
Patient Language: English

MITI DETAILS

Starting A1c: 12.8 on 2/2/2023
Starting GFR: >= 60
Starting BMI: 39.12 on 2/2/2023
Insulin Brand at Enrollment: Lantus
Delivery Method: Pen
Program: MITI-GLP1
GLP1 Brand at Enrollment: Ozempic
MITI Preferred Titration Call Time:

MESSAGE DETAILS

Contact Time: 08:15
Last Msg Sent: 06/21/23 08:20

Weekly Values | **Weekly Call Log** | **Algorithm** | **Copy Call Log to Epic** | **Copy Graduation Info to Epic**

Week	Call Date	Current Dose (Insulin)	Current Dose (GLP-1)	Fr	Mo	Tu	We	Th	Change by (Insulin)	New Total Dose (Insulin)	Change by (GLP-1)	New Total Dose (GLP-1)	Trans-lator	Call Completed?
1								131						
2	04/20/23	40	0.5	104	124	132	98	159	-5	35	0	0.5	No	Yes
3	04/27/23	35	0.5	140	101	157	123	104	-5	30	0	0.5	No	Yes
4	05/04/23	30	.5	147	142	137	120	131	-5	25	+0.5	1	No	Yes
5*	05/11/23	25	.5	116	110	101	127	97	-5	20	+0.5	1	No	Yes
6	05/18/23	20	1	190	116	105	102	134	-5	15	0	1	No	Yes
7	05/25/23	15	1	120	113	159	98	110	5	10	0	1	No	Yes
8	06/01/23	10	1	92	103	144	120	157	5	5	0	1	No	Yes
9	06/08/23	5	1	121	120	132	136	97	-5	0	+1	2	No	Yes
10	06/15/23	0	2	104	98	142	119	122	0	0	0	2	No	Yes
11				104	110	108	126							
12														

Bellevue

Weekly Values	Weekly Call Log	Algorithm	Copy Call Log to Epic

Week	Call Date	Current Dose (Insulin)	Current Dose (GLP-1)	Fr	Mo	Tu	We	Th	Change by (Insulin)	New Total Dose (Insulin)	Change by (GLP-1)	New Total Dose (GLP-1)	Trans-lator	Call Completed?
1	10/26/23	50	0.75	127	144	144	116	163	-5	45	0.75	1.5	No	Yes
2	11/02/23	50	1.5	145	180	164	159	156	0	50	0	1.5	No	Yes
3	11/09/23	50	trulicity 1.5	113	132		177	127	-5	45	0	1.5mg	No	Yes
4	11/16/23	50	trulicity 1.5mg		136	156	146	163	5	45	0	1.5mg	No	Yes
5*	11/24/23	na	na	113	106	150	141		na	na	na	na	No	Yes
6	11/30/23	na	na	206	158	143	128	107	na	na	na	na	N/A	N/A
7	12/07/23	45	1.5	121	135	129	127	174	-10	35	+1.5	3	No	Yes
8	12/14/23	35	1.5	129	145	102	160	164	0	35	+1.5	3	No	Yes
9	12/21/23	35	Trulicity 3mg	161	166	170	160	110	-3	32	0	3mg	No	Yes
10	12/28/23	35	Trulicity 3mg	180		139	136	150	-3	32	0	3mg	No	Yes
11	01/04/24	32	3mg	139		165	128	150	-2	30	0	3	No	Yes
12	01/11/24	30	Trulicity 3mg	158	134	112	138	185	-2	28	0	3mg	No	Yes
13				155		179	149							

- MITI-GLP1 Pilot Data

Insulin Dose Changes

	All Discharges N=58	Standard Discharges N=52	LTFU Discharges N=6
Insulin lowered by any amount	55 95%	52 100%	3 50%
Insulin lowered by ≥50%	46 79%	45 87%	1 17%
Insulin stopped completely	37 64%	37 71%	0 0%

GLP1-RA Dose Changes

	All Discharges N=58	Standard Discharges N=52	LTFU Discharges N=6
GLP-1 at max dose upon entry	5	5	0
GLP1- dose increased by at least one level or already started on max	51 88%	48 92%	3 50%
GLP1-dose at discharge was max dose	37 64%	36 69%	1 17%

Hypoglycemia

	All Patients N=58
Text messages received back	2757
Hypoglycemia (BG <80 mg/dL)	5
The Value(s) Texted	79 mg/dL 74mg/dL, 73mg dL, 63 mg/dL 79mg/dL
%	0.18%

Participant Responsiveness n=58

	Totals	Totals	%
Text Response Rate	2902 Total Texts Sent	2757 received	95%
Weekly Call Connection	564 Cumulative Weeks	505 weeks Connected w/ Patients	90%

GLP1 Initiation

Advanced options

CGM

Remote Monitoring

- Expanded Eligibility!
- Teaching points about CGM
- Workflow that we are using at Bellevue

- Expanded Eligibility
- Medicaid
  - ‘on insulin’
- Medicare
  - ‘on insulin’
- Uninsured
  - FSL- $75/month

Medicaid

NYRx Preferred Diabetic Supply Program (PDSP) Fact Sheet

Background:

On October 1, 2009, per Social Services Law Chapter 55, Article 5 Title 11, Section 365-a[2][g] New York State implemented a Preferred Diabetic Supply Program for NYRx, the Medicaid Pharmacy Program. Members may obtain preferred blood glucose monitors, diabetic test strips, continuous glucose monitors (CGM) and disposable insulin pumps from their NYS Medicaid enrolled pharmacy or durable medical equipment (DME) provider.

Coverage Criteria and/or Quantity limits:

Diabetic Test Strips

- For Type 1 Diabetics: 300 strips per 30 days
- For Type 2 Diabetics: 100 strips per 30 days

Continuous Glucose Monitors (CGM)

- Diagnosis of gestational diabetes, or
- Diagnosis of type 1 or type 2 diabetes **and**:
  - Ordering provider is enrolled in Medicaid and is an endocrinologist, or provider with experience in diabetes treatment, **and**
  - Member is compliant with regular visits to review CGM data with their provider, **and**
  - Member is on self or care giver administered insulin or an insulin pump, **and**
  - Member or member caregiver can hear and view CGM alerts and respond appropriately.

Disposable Insulin Pumps

- Diagnosis of gestational diabetes, or
- Diagnosis of type 1 or type 2 diabetes **and:**
  - Ordering provider is enrolled in Medicaid and is an endocrinologist or provider who has experience managing patients on continuous subcutaneous insulin infusion therapy, **and**
  - Member has been on a program of multiple daily injections of insulin (i.e., at least three injections per day) with frequent self or care giver adjustments of their insulin dose for at least six months prior to initiation of the insulin pump and has failed to achieve acceptable control of blood sugars that are not explained by poor motivation or compliance; **and**
  - the member completed a comprehensive diabetes education program as meets one or more of the following criteria while receiving multiple daily injections:
    - HbA1c >seven percent

Medicaid

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Continuous Glucose Monitors (CGM)

- Diagnosis of gestational diabetes, or
- Diagnosis of type 1 or type 2 diabetes **and**:
  - Ordering provider is enrolled in Medicaid and is an endocrinologist, or provider with experience in diabetes treatment, **and**
  - Member is compliant with regular visits to review CGM data with their provider, **and**
  - Member is on self or care giver administered insulin or an insulin pump, **and**
  - Member or member caregiver can hear and view CGM alerts and respond appropriately.

Medicare

FROM THE AMERICAN ACADEMY OF FAMILY PHYSICIANS

Medicare Coverage of Continuous Glucose Monitoring – 2023 Updates

AUTHORS: SEAN M. OSER, MD, MPH, AND TAMARA K. OSER, MD

JANUARY/FEBRUARY 2024

Introduction

The American Diabetes Association's (ADA's) *Standards of Care in Diabetes–2023* recommends consistent use of continuous glucose monitoring (CGM) for people who have type 1 or type 2 diabetes and take insulin.[1] This includes any insulin regimen, whether basal insulin only, multiple daily administrations of insulin, or an insulin pump.

In April 2023, the Centers for Medicare & Medicaid Services (CMS) updated its Medicare coverage criteria for CGM, making them highly aligned with the ADA standards of care.[2] In this supplement, we will discuss the potential utility of CGM in diabetes management, explore the updated Medicare coverage criteria, review CGM systems cleared by the U.S. Food and Drug Administration (FDA), and consider key steps involved in prescribing CGM and potential challenges.

Updated Medicare Coverage Criteria for CGM

Updates to the coverage criteria for CGM allow many more Medicare beneficiaries to qualify. The patient's medical record

Medicare

Updated Medicare Coverage Criteria for CGM

Updates to the coverage criteria for CGM allow many more Medicare beneficiaries to qualify. The patient's medical record should show that they meet the following four eligibility requirements[7]:

1. The patient has diabetes mellitus.
2. The patient (or their caregiver) has been sufficiently trained on the CGM system's use. The prescription for CGM serves as evidence that the patient meets this requirement.
3. CGM is prescribed in accordance with the FDA's indications for use of the system.
4. CGM is prescribed to improve glycemia in a patient who is treated with insulin and/or has a documented history of "problematic hypoglycemia."

CGMs: Medicare

It is important to remember that Medicare covers CGM through the DME benefit, not the pharmacy benefit.

What potential challenges are involved in prescribing CGM?

The insurance authorization process is the most noted barrier to effective implementation of CGM.[5] One potentially confusing aspect of this process is the fact that Medicare CGM prescriptions must be sent to a DME supplier rather than a pharmacy (unless the pharmacy is also a DME supplier). If Medicare does not approve a pharmacy's claim, the pharmacy may communicate to you or your patient that CGM is "not covered." However, in most cases, the claim would have been approved if it was processed through the DME benefit rather than the pharmacy benefit. If a pharmacy says CGM is not covered, try resending the prescription to a DME supplier instead.

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Uninsured

CGM

- Support programs for patients that are uninsured
- The least expensive that I have found is with FSL
- 2 sensors (14 days each) for $75
  - Pt calls an FSL 855 number
  - Gives their email address
  - Coupon is emailed
  - Good for the calendar year

- Expanded Eligibility!
- General CGM Info
- Workflow that we are using at Bellevue

Bellevue

General Info: What is a CGM

CGM glucose sensor measures interstitial glucose

Transmitter

Skin

Sensor

Interstitial Fluid

Interstitial Glucose (Sensor Glucose-SG)

Blood Glucose (BG)

Blood Vessel

©Alberta Health Services

General Info: Main Brands, Sensors

- Libre

- Dexcom

General Info: Readers

- FreeStyle Libre 3

- Dexcom 7

The Reader can be:
Smart Phone/App -vs- a Reader

To use the Smart Phone +App:

- Phone Compatible
- Operating Compatible
- Tech Savvy
- Know Apple ID / Google Play password
- Know email and password + access to it

Bellevue

General Info: AGP

AGP Report

LibreView

April 14, 2024 - April 27, 2024 (14 Days)

GLUCOSE STATISTICS AND TARGETS

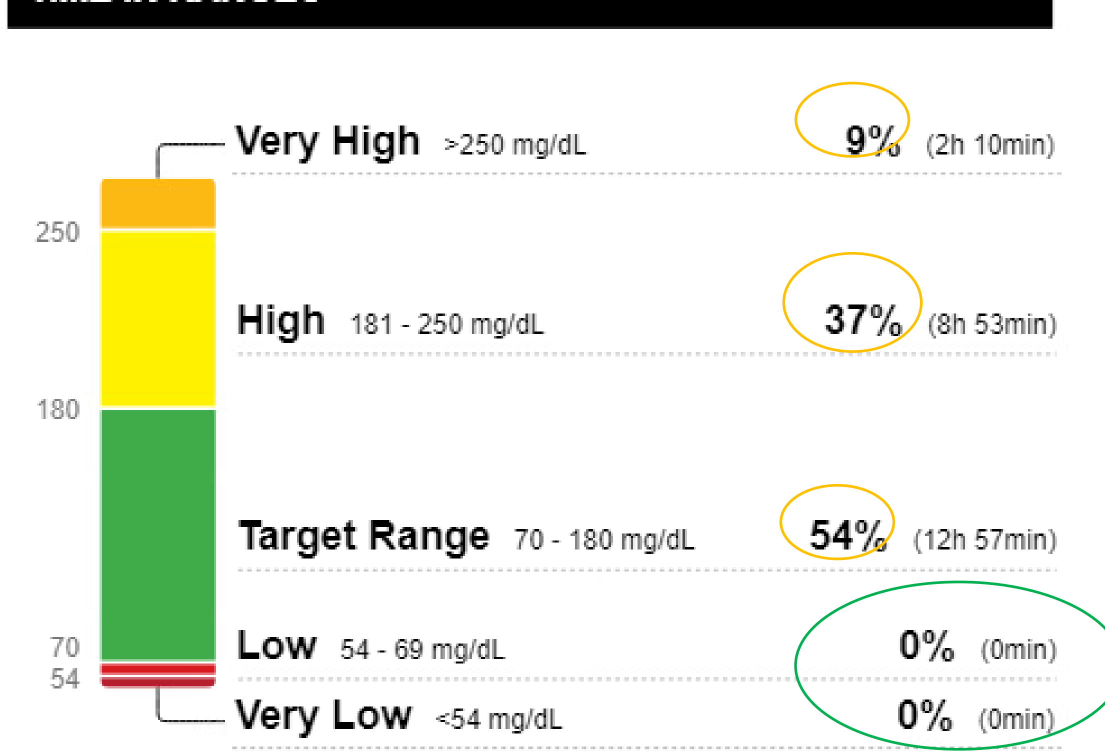
April 14, 2024 - April 27, 2024 — **14 Days**

Time CGM Active: **98%**

Ranges And Targets For	Type 1 or Type 2 Diabetes
Glucose Ranges Target Range 70-180 mg/dL	Targets % of Readings (Time/Day) Greater than 70% (16h 48min)
Below 70 mg/dL	Less than 4% (58min)
Below 54 mg/dL	Less than 1% (14min)
Above 180 mg/dL	Less than 25% (6h)
Above 250 mg/dL	Less than 5% (1h 12min)
Each 5% increase in time in range (70-180 mg/dL) is clinically beneficial.	

Average Glucose	**179** mg/dL
Glucose Management Indicator (GMI)	**7.6%**
Glucose Variability	**26.7%**

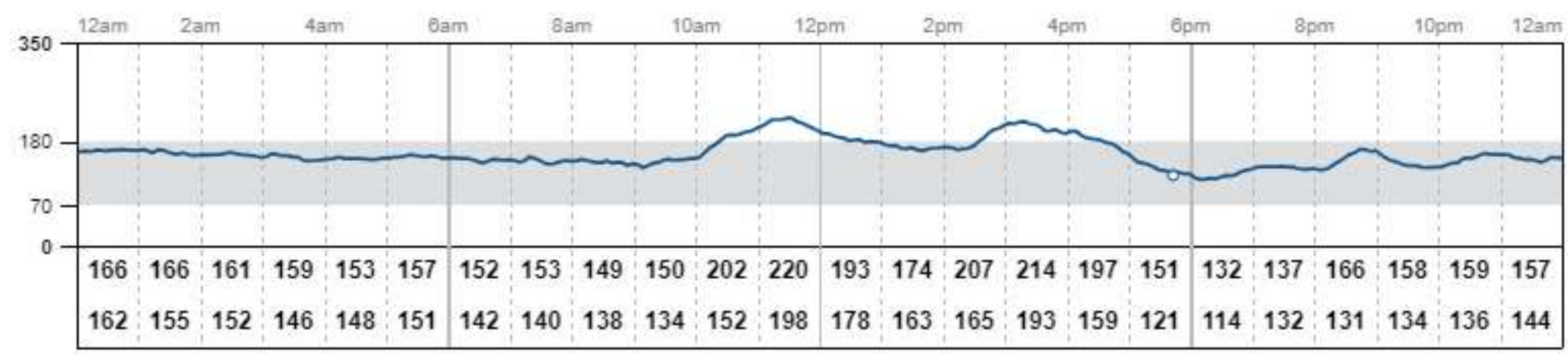
Defined as percent coefficient of variation (%CV); target ≤36%



Bellevue

TUE Apr 23

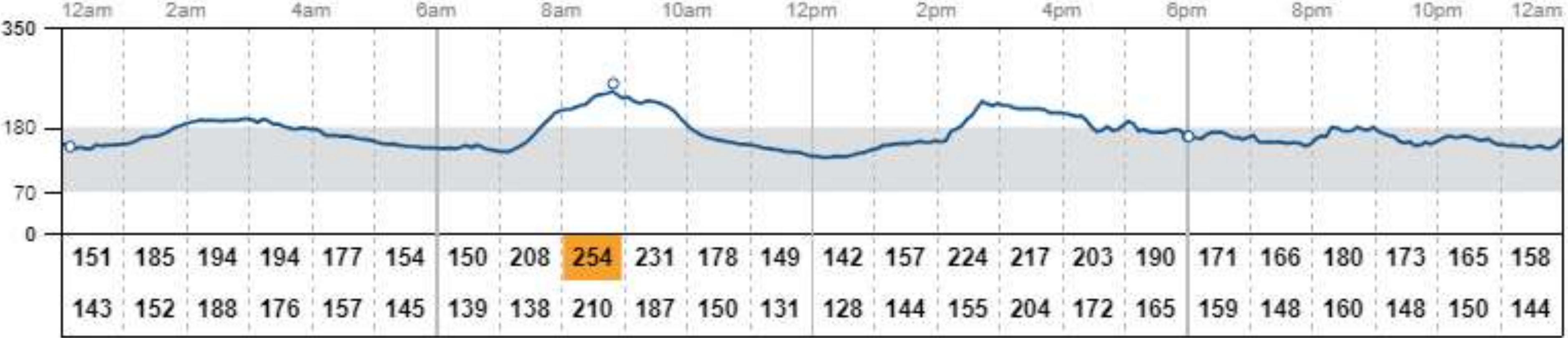
Glucose mg/dL



Max	166	166	161	159	153	157	152	153	149	150	202	220	193	174	207	214	197	151	132	137	166	158	159	157
Min	162	155	152	146	148	151	142	140	138	134	152	198	178	163	165	193	159	121	114	132	131	134	136	144

WED Apr 24

Glucose mg/dL



Max	151	185	194	194	177	154	150	208	254	231	178	149	142	157	224	217	203	190	171	166	180	173	165	158
Min	143	152	188	176	157	145	139	138	210	187	150	131	128	144	155	204	172	165	159	148	160	148	150	144

Bellevue

WED Mar 27

Glucose mg/dL

	12am		2am		4am		6am		8am		10am		12pm		2pm		4pm		6pm		8pm		10pm	
Max	400	400	324	287	311	265	232	201	185	173	184	355	400	400	332	250	188	293	309	350	384	400	400	400
Min	400	325	220	203	271	234	201	154	149	167	166	189	363	338	256	186	165	193	274	307	349	389	400	384

THU Mar 28

Glucose mg/dL

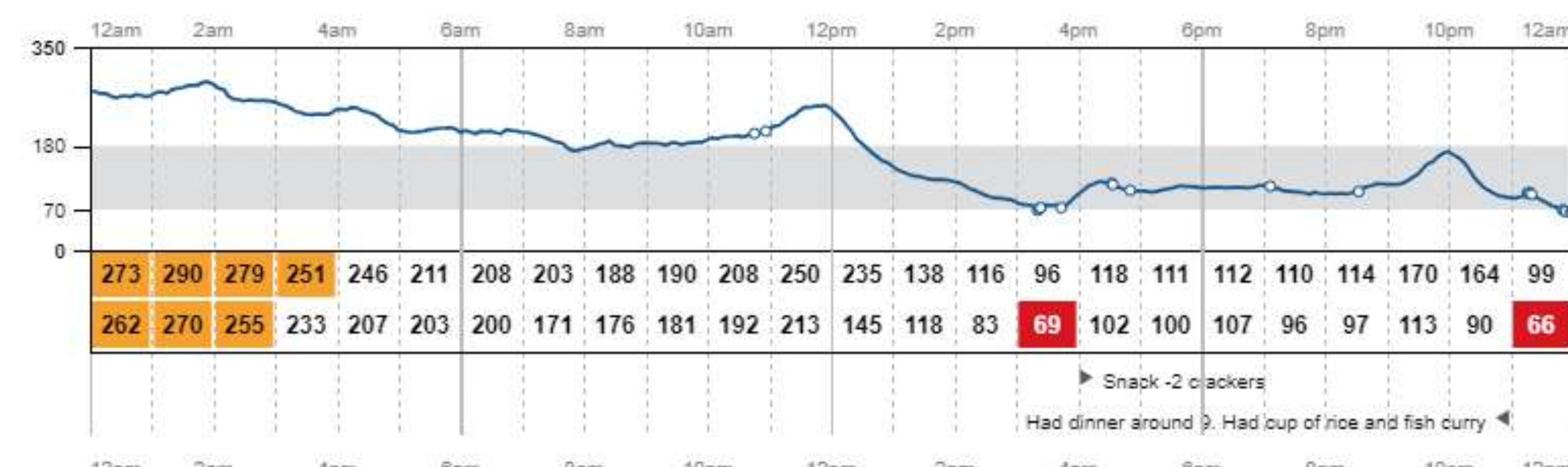
	12am		2am		4am		6am		8am		10am		12pm		2pm		4pm		6pm		8pm		10pm	
Max	379	336	355	400	400	400	400	372	310	296	362	367	332	288	266	360	387	400	400	400	400	376	308	313
Min	342	298	307	345	400	400	377	318	257	240	306	341	293	233	212	284	363	384	397	400	377	314	287	291

Notes

Fried chiken and 1/2 biscuit

Bellevue

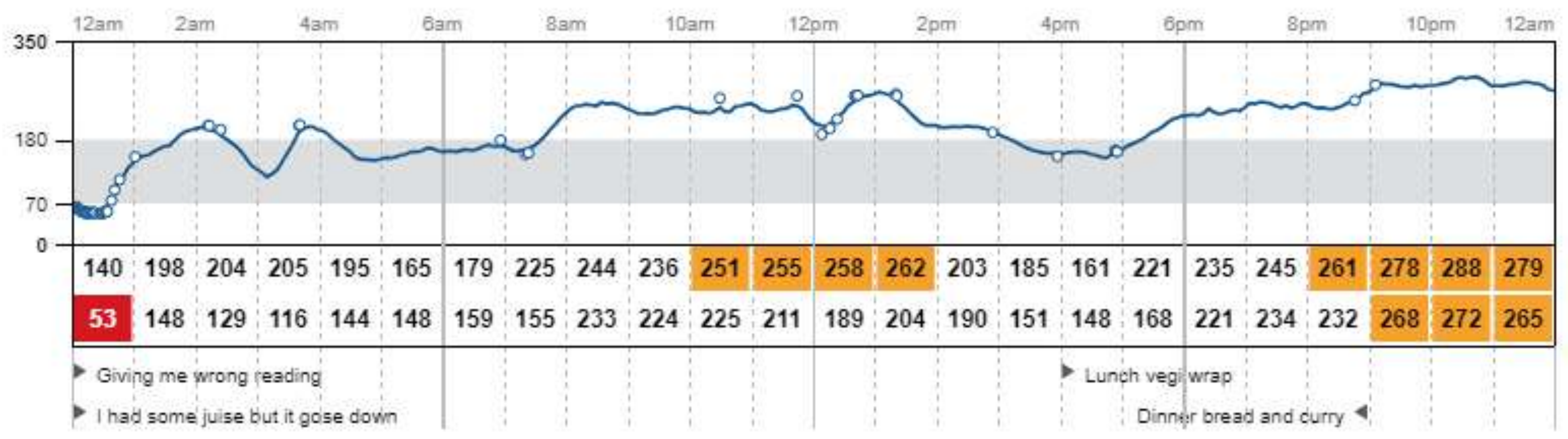
THU Apr 4



Glucose mg/dL																								
Max	273	290	279	251	246	211	208	203	188	190	208	250	235	138	116	96	118	111	112	110	114	170	164	99
Min	262	270	255	233	207	203	200	171	176	181	192	213	145	118	83	69	102	100	107	96	97	113	90	66

Notes

FRI Apr 5



Glucose mg/dL																								
Max	140	198	204	205	195	165	179	225	244	236	251	255	258	262	203	185	161	221	235	245	261	278	288	279
Min	53	148	129	116	144	148	159	155	233	224	225	211	189	204	190	151	148	168	221	234	232	268	272	265

Notes

- Expanded Eligibility!
- General CGM Info
- Workflow that we are using at Bellevue

Introducing Idea

Writing Scripts

Ensure : actually able to get the CGM

F/up: Phone/App vs Reader

Teach how to

1. Put on sensor
2. Use the sensor

Introducing Idea

Writing Scripts

Ensure : actually able to get the CGM

F/up: Phone/App vs Reader

Teach how to

1. Put on sensor
2. Use the sensor

PCP

Pharm D

RN

CGM

PCP

Introducing Idea
Writing Scripts

- Introduce Idea
- Send in scripts
  - Medicaid: E-Rx, regular pharmacy, call
  - Private Insurance: E-Rx, regular pharmacy, call
  - Uninsured: E-Rx, regular pharmacy, call (FSL3 855#)
  - Medicare: Send to a DME supplier, don’t call
- Refer to the Pharm D:
  - I am trying to start Patient XYZ on a CGM, FSL3 scripts sent, please f/up to ensure receipt or troubleshoot. Please f/up on if they can use their phone/app as the reader.

CGM

Pharm D

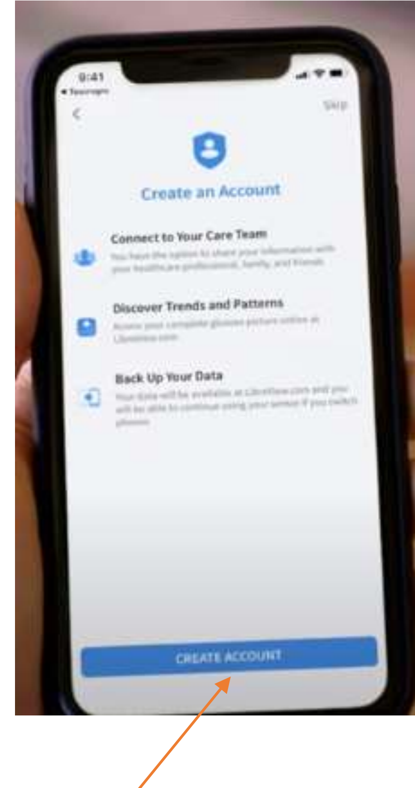
Ensure : actually able to get the CGM

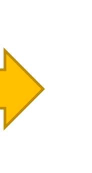
F/up: Phone/App vs Reader

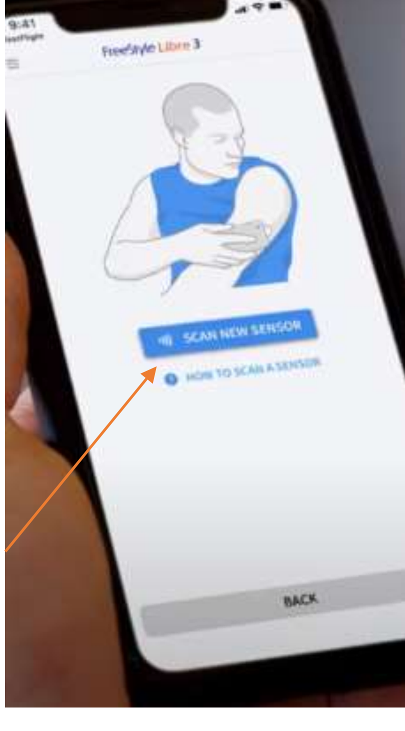
- Televisit
- Confirms if patient received the devices
  - Or Troubleshoot
- Explores the
  - Phone/App as 'reader'
    - Download the App?
    - Create an account on the App?
  - Reader as 'reader'

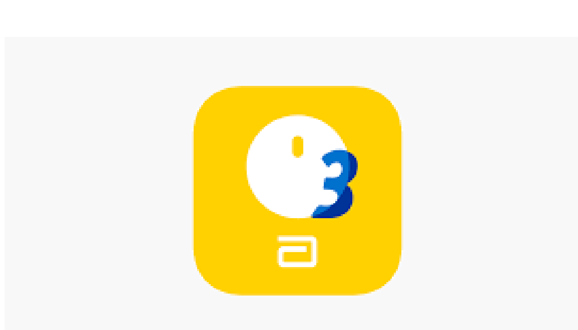
Apple ID or Google Play password needed

Email needed









CGM

Pharm D

Ensure : actually able to get the CGM

F/up: Phone/App vs Reader

- Televisit
- Confirms if patient received the devices
  - Troubleshoots
- Explores the
  - Phone/App as ‘reader’
    - Download the App?
    - Create an account on the App?
  - Reader as ‘reader’
- Messages the DM Nursing Team to request apt for in-person teaching
- Patient brings their own devices to the teaching

RN

Teach how to

1. Put on sensor
2. Use the sensor

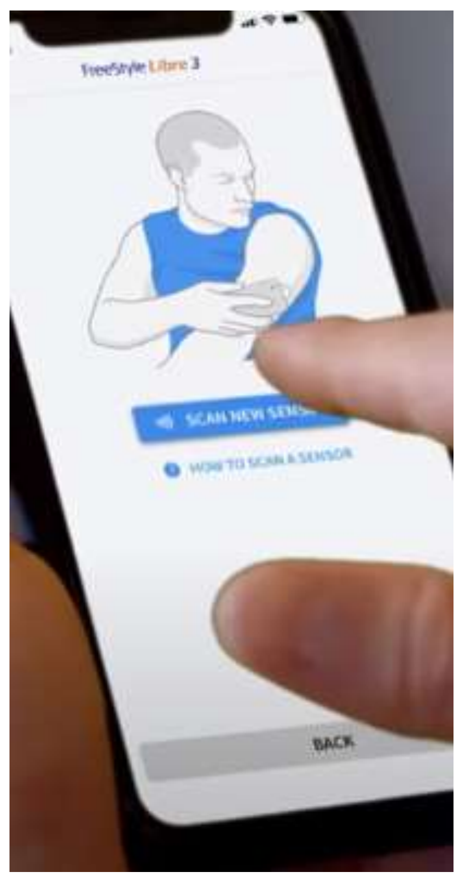
- In-Person
- Teaches patient:
  - Put on a new sensor
  - Start the sensor
  - Customize Alarms
  - Read the screen

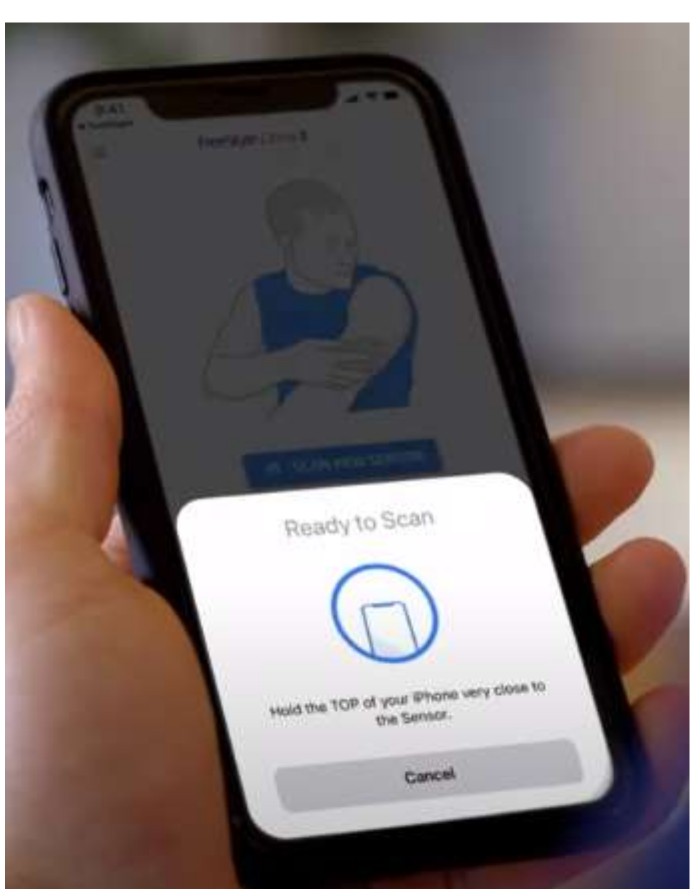
STEP 1: WASH

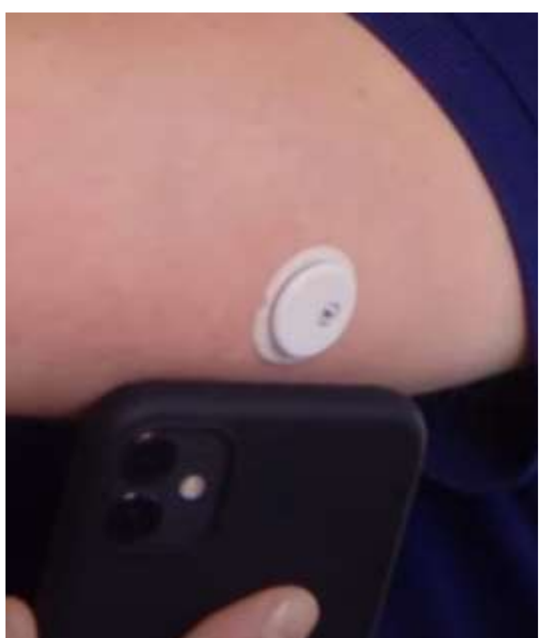
STEP 2: DRY

STEP 3: CLEAN & AIR DRY

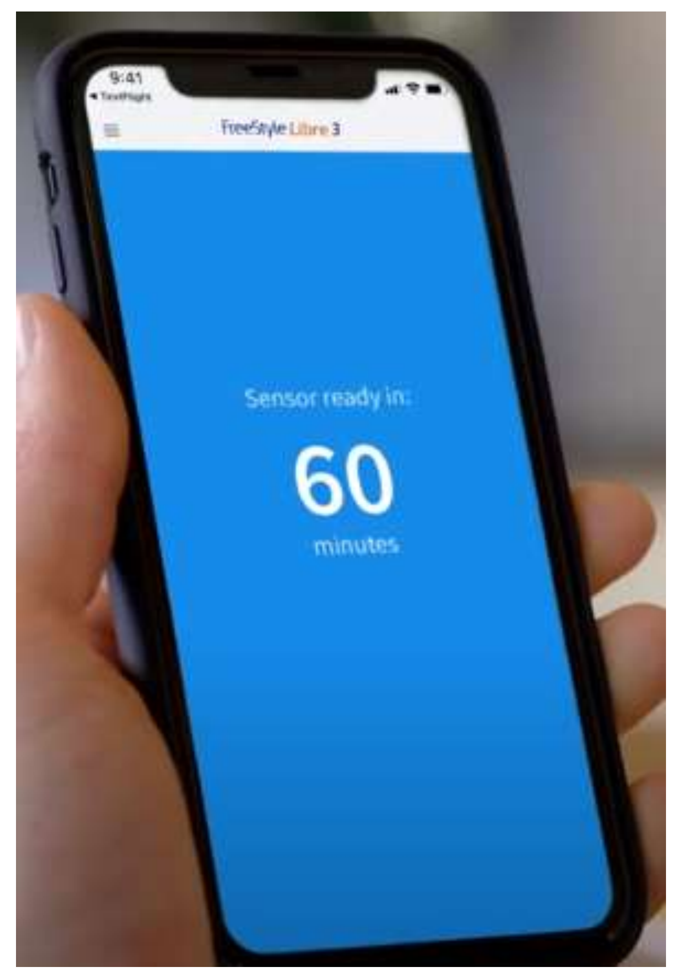
FreeStyle


FreeStyle Libre 3
HOW TO SCAN A SENSOR
BACK


Ready to Scan
Hold the TOP of your iPhone very close to the Sensor.
Cancel



SLOW



FYI-
There is a
Warm up period

FSL3: 60 min
FSL2: 60min
Dexcom G7: 30 min
Dexcom G6: 2 hrs

Bellevue

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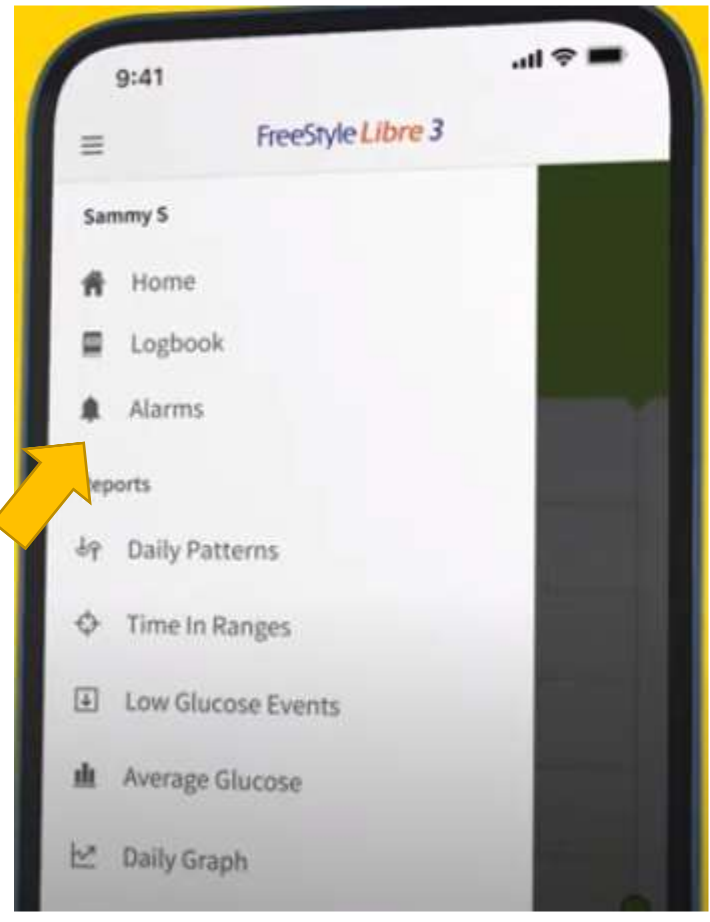
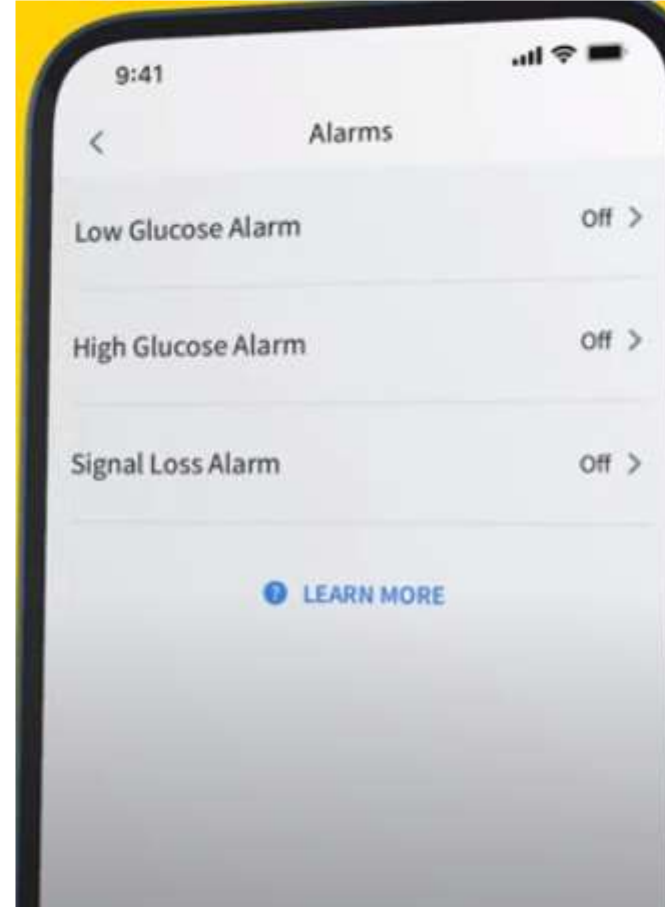
Click on Menu Bars

Click on Alarms



Three Alarms to Customize



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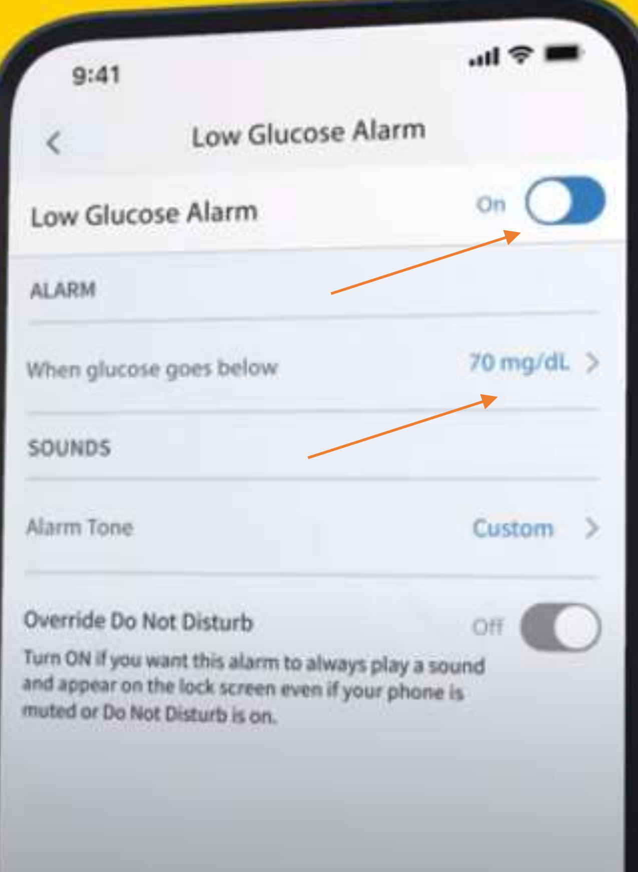
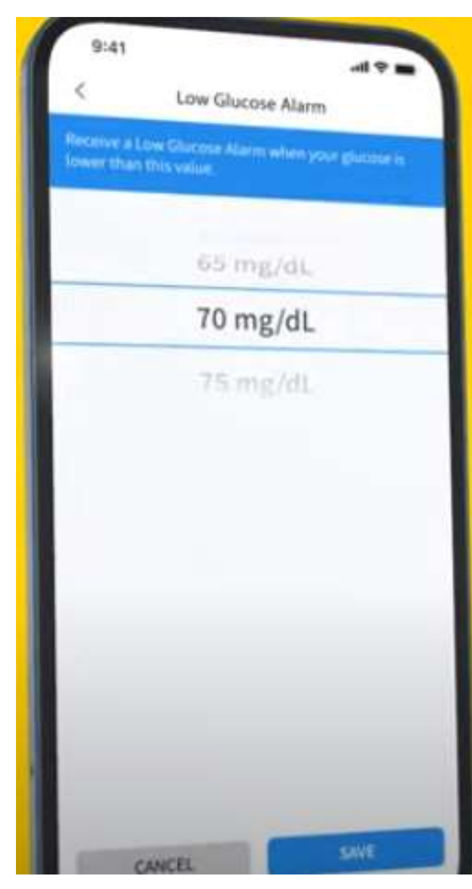
Start with Low Alarms

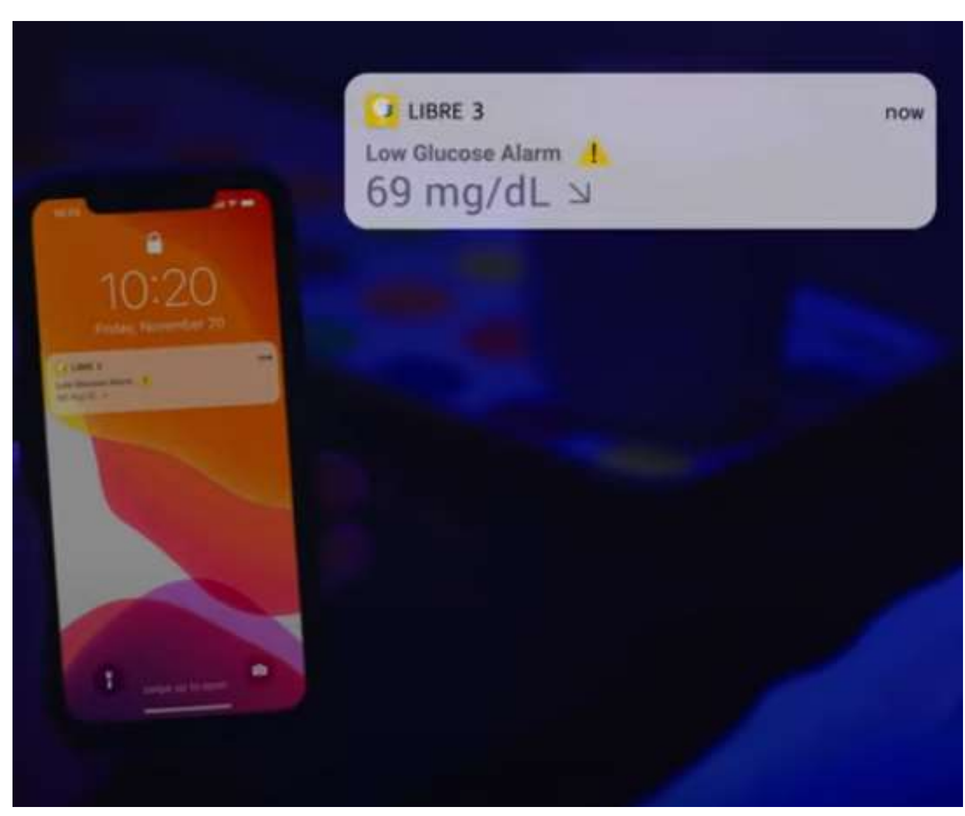
Turn them ON



Set Threshold



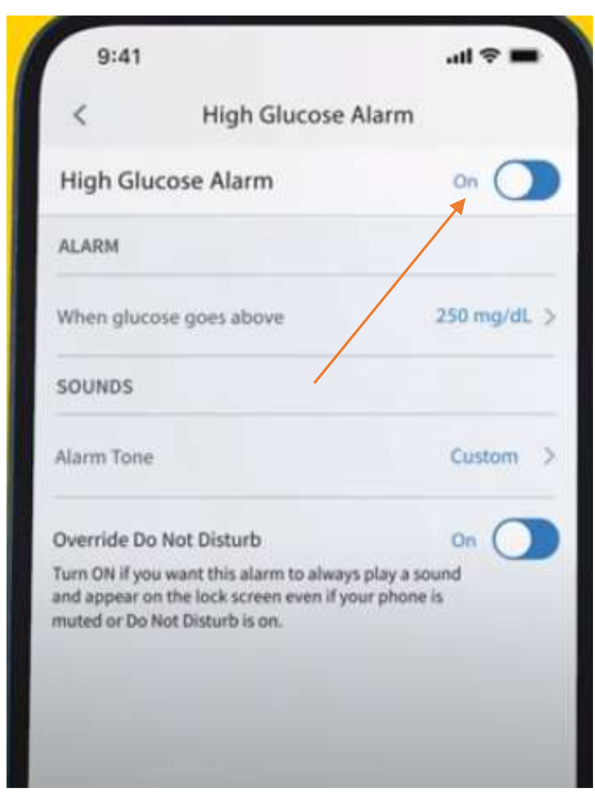
OVERRIDE Do Not Disturb



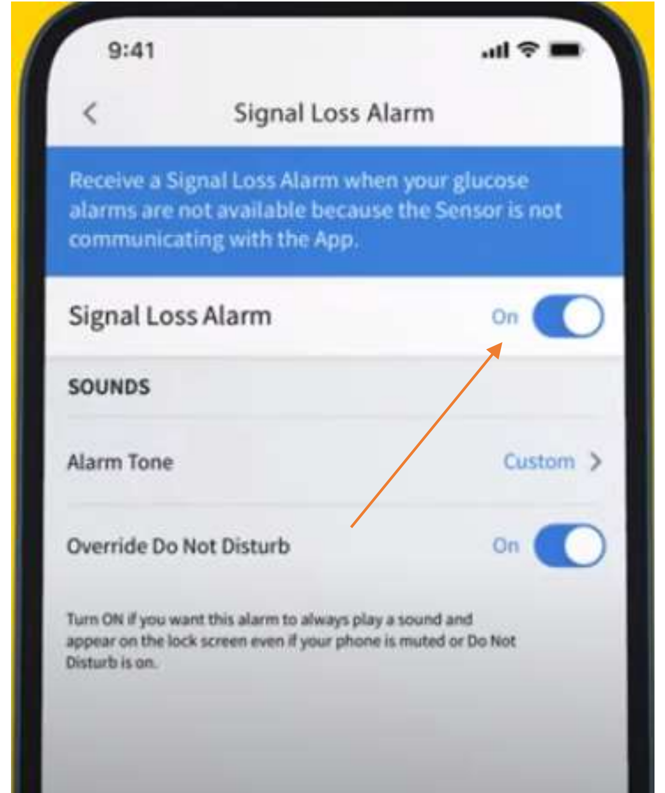
This is what a low Glucose Alarm Looks Like

Bellevue

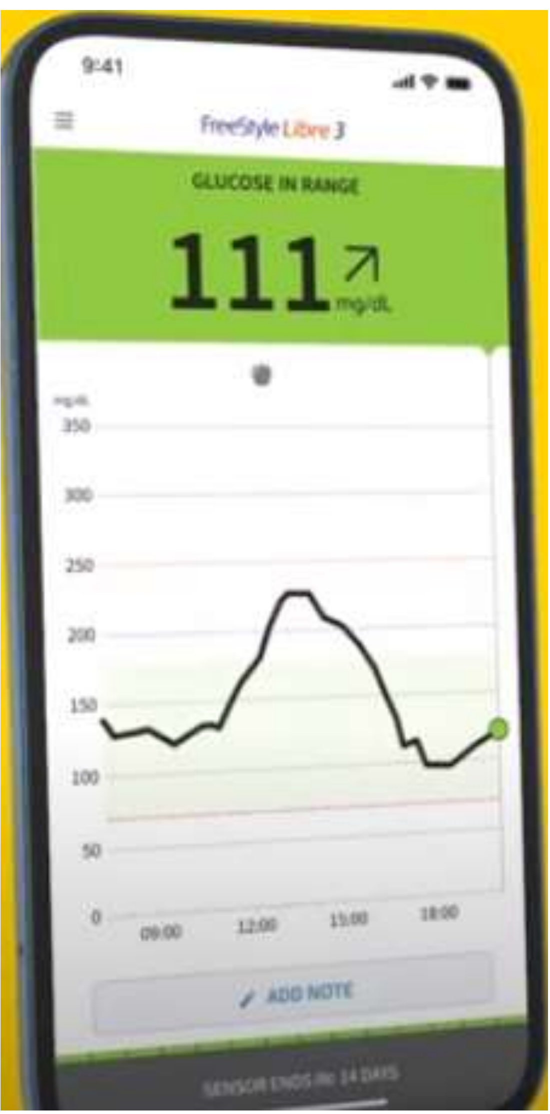
There is also a..
High Glucose Alarm to customize



And a...
Signal Loss Alarm



If a patient 'swipes up' and closes the FSL app...
They will not get alarms


9:41
FreeStyle Libre 3
GLUCOSE IN RANGE
111
mg/dL
350
300
250
200
150
100
50
0
09:00
12:00
15:00
18:00
ADD NOTE

10:23pm
112
mg
dL
350
250
150
50
10am
4pm
10pm
FreeStyle Libre 3
Abbott

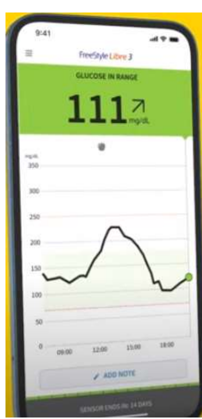
The Top Shows the:

1) Glucose Level
2) If the glucose is in range
3) What direction the glucose is headed- Trend Arrows

Trend Arrows:
Five options

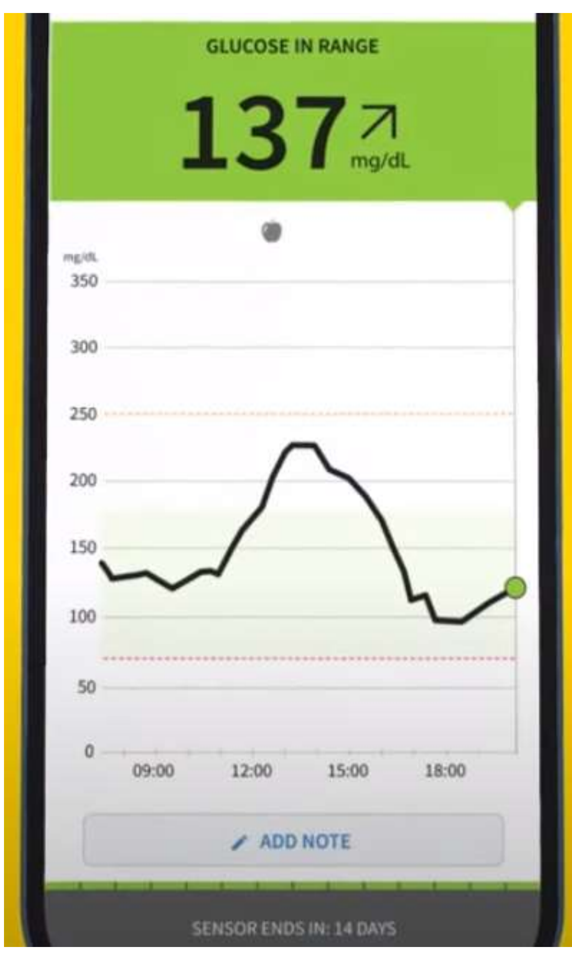
Trend Arrows:
Help the
patient make
good decisions

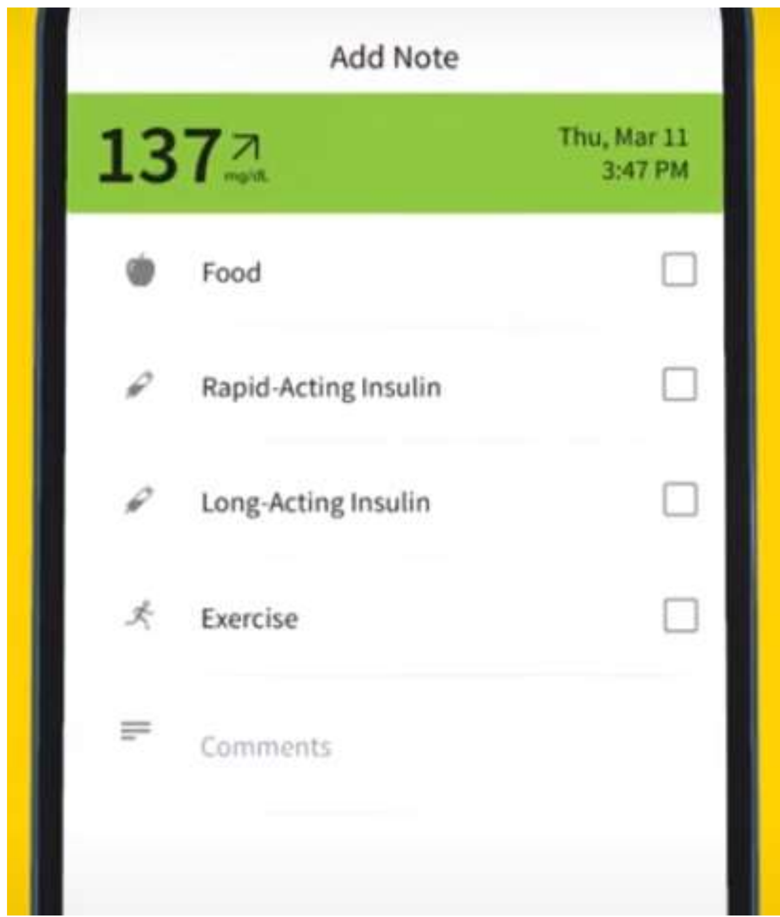
Middle of the screen


FreeStyle Libre 3
GLUCOSE IN RANGE
111
mg/dL
ADD NOTE

150
100
50
0
09:00
12:00
15:00
18:00
ADD NOTE
SENSOR ENDS IN: 14 DAYS

Bellevue





Add Note

137 mg/dL

Thu, Mar 11
3:47 PM

Food

Meal

Breakfast
Lunch
Dinner
Snack

_____ grams of carbs

Rapid-Acting Insulin

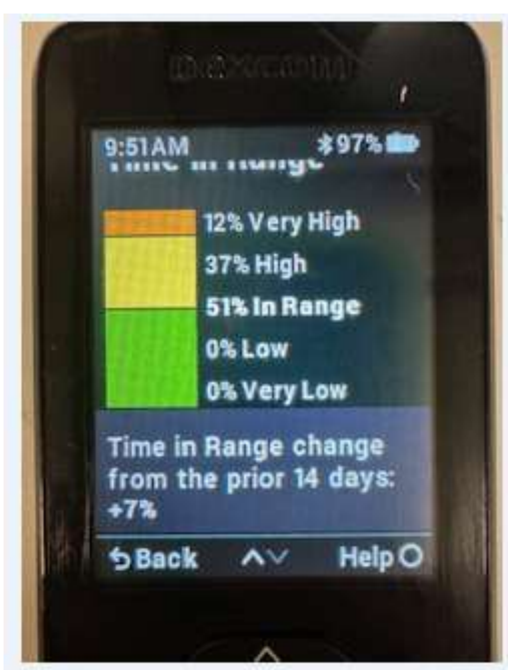
_____ units

Long-Acting Insulin

_____ units

9:50 AM
97%
Reports
3-Day Report
7-Day Report
14-Day Report
30-Day Report
90-Day Report
Back

9:51AM
97%
14-Day Glucose Summary
Average Glucose
186 mg/dL
GMI
7.8%
Time in Range
Back
Help


9:51AM
97%
12% Very High
37% High
51% In Range
0% Low
0% Very Low
Time in Range change from the prior 14 days:
+7%
Back
Help

Workflow Summary:

CGM

Introducing Idea Writing Scripts	Ensure : actually able to get the CGM F/up: Phone/App vs Reader	Teach how to 1. Put on sensor 2. Use the sensor

PCP	Pharm D	RN

Bellevue

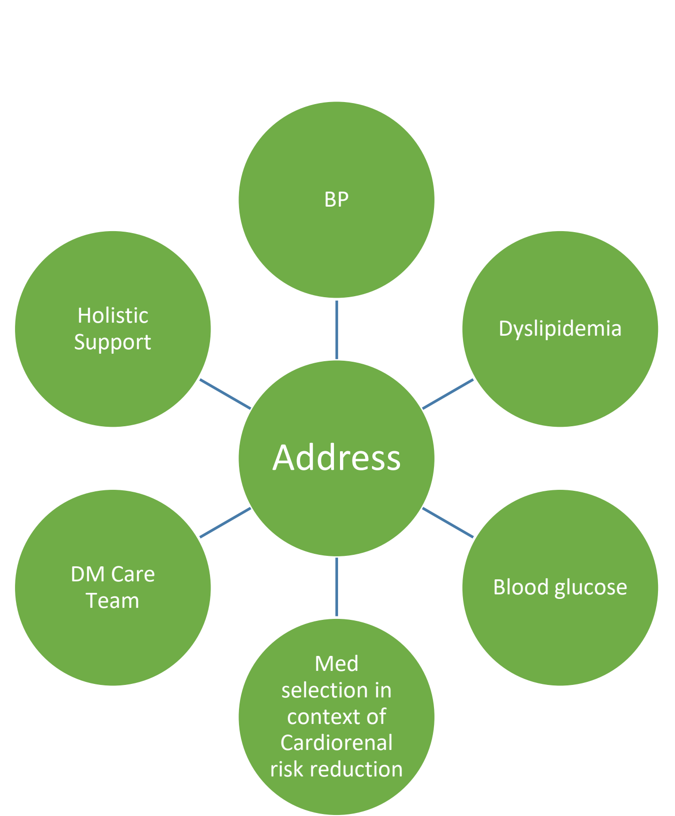
Why shouldn't you write with a broken pencil?

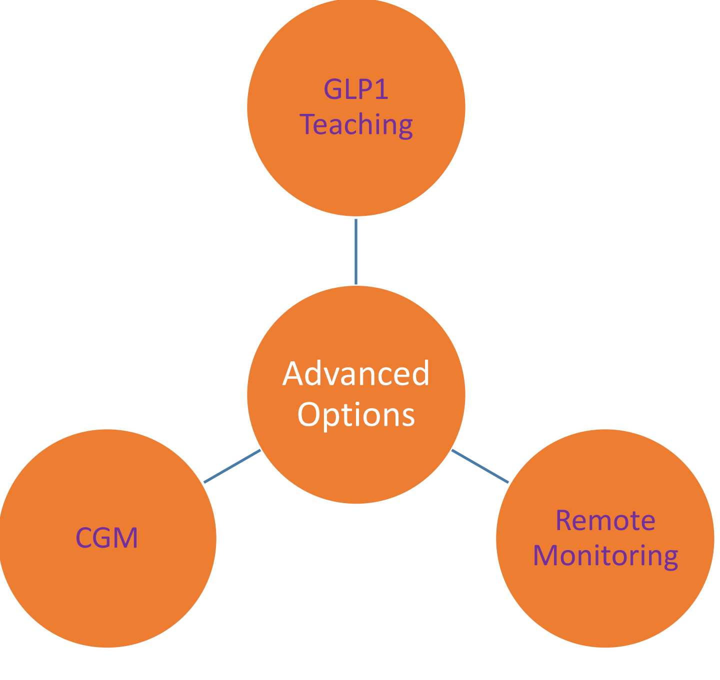
Because it's pointless.

Bellevue

Summary

NYU School of Medicine
NYU LANGONE MEDICAL CENTER

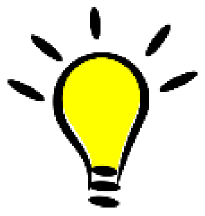




CHCANYS Diabetes Continuum of Care Conversation

Supporting Patients' Diabetes Management & Optimizing Care Delivery

Thank you! Comments/ Questions?



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June 12, 2024
CHCANYS