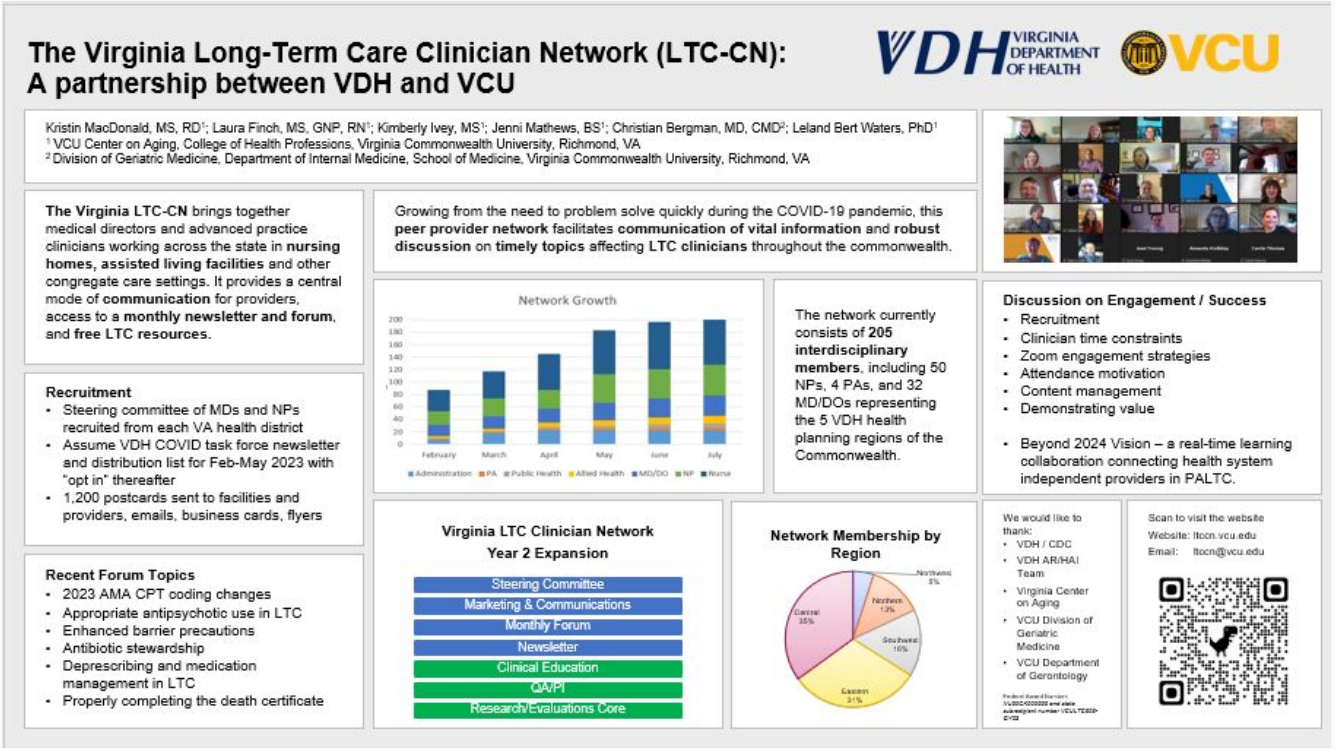
Virginia Long-Term Care Clinician Network Monthly Forum

September 20, 2023

LTC Clinician Network Recent Presentations



VDH LTC Cross Collaboration Assembly Richmond, VA, Sept 12, 2023

VAMDA - Virginia Society for Post Acute and LTC Medicine VA Beach, Sept 16, 2023

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Introducing the Network - Share w/ Peers

About the Network: The Virginia Long-Term Care Clinician Network (LTC-CN) brings together medical directors and clinicians practicing in nursing homes, assisted living facilities, and other congregate care settings, such as Program of All-inclusive Care for the Elderly (PACE).

Member Benefits:

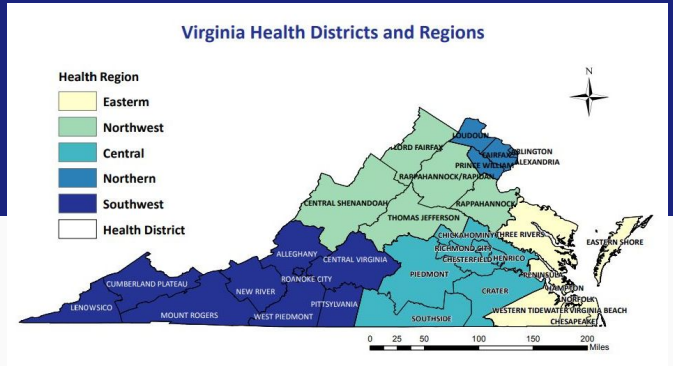
- Free peer network fostering open discussion and collaboration
- Monthly newsletter
- Monthly forum (third Wednesday of each month from 4:00-5:00 pm)
    - **Each registered Network member receives a unique Zoom invite link. Please do not forward your link as this may lead to problems joining the Forum. Encourage your colleagues to register instead!**

Where to find us, slides, monthly newsletter?

SCAN ME

ltccn.vcu.edu

Who are we?



Staff

- Christian Bergman, MD - Principal Investigator
- Bert Waters, PhD - Project Director
- Laura Finch, MS, GNP, RN - Clinical Coordinator
- Kim Ivey, MS - Communications / Administration
- Jenni Mathews - Survey Data & Evaluations Specialist
- Kristin MacDonald, MS, RD - Newsletter & Content Editor

Steering Committee

Eastern Region: Rob Walters, MD & Mary Mallory, NP
Northwestern Region: Jonathan Winter, MD
Central Region: William Reed, MD & Tangela Crawley-Hardy, NP
Southwest Region: Katherine Coffey-Vega, MD & Jamie Smith, NP
Northern Region: Noelle Pierson, NP
Statewide: Shawlawn Freeman-Hicks, NP

Members: All of you who have registered for the LTC Clinician Network

Monthly Forum - Every 3rd Wednesday, 4-5 PM

Forum topics will be in areas of interest to clinicians working in long term care. We will continue to integrate COVID-19 topics in our discussion. Share the membership QR code with your work colleagues so they can get a unique link.

Upcoming Forums

- October 18 Medical Updates
- November 15 Vaccination Updates
- December 13 **** Change in Date
- January 17, 2024 Trauma Informed Care

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Monthly Forum Structure

Introduction - 2 minutes

Open Discussion - 10 minutes

Featured Monthly Topic - 15-20 minutes with discussion

Updates - 3 minutes

Feedback - 3 minutes verbal and evaluation at end of meeting

Pandemic Planning/Preparedness Poll

In preparing for the next pandemic, what is the priority in your experience?

A. Preparedness (PPE, communication networks, emergency preparedness plans, vaccination delivery systems, equipment, cleaning)
B. Addressing challenges and burdens such as regulation, information flow
C. Sustainability (funding, testing, screening, burnout of staff)
D. Collaboration (partnerships, guidance, continuum of care)
E. Staff Education (infection prevention, QAPI)
F. All of above

Welcome!

As you join, please turn on cameras and mic or unmute your phone and say hello to your Virginia colleagues. We all have a common bond: the choice to serve in a unique area of health care. During the presentation we can mute ourselves until it is time for more interaction.

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Share with your peers on the Virginia LTC-CN

Please use the Chat box to share:

- **Name**
- **Role**
- **Location in Virginia (city or region)**
- **Favorite fall activity in Virginia**

Thank You for taking care of Virginia's residents of PACE, assisted living and nursing homes!

Diabetes Update

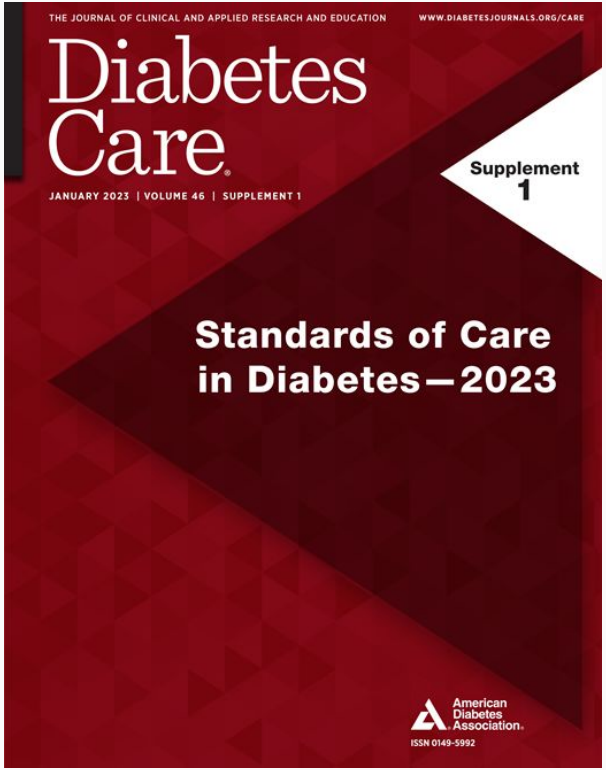
Dr. Christian Bergman

Diabetes Update 2023

Based on American Diabetes Association Standards of Care in Diabetes 2023 Update released Jan 2023

[Volume 46 Issue Supplement_1 | Diabetes Care](https://diabetesjournals.org/care/issue/46/Supplement_1)

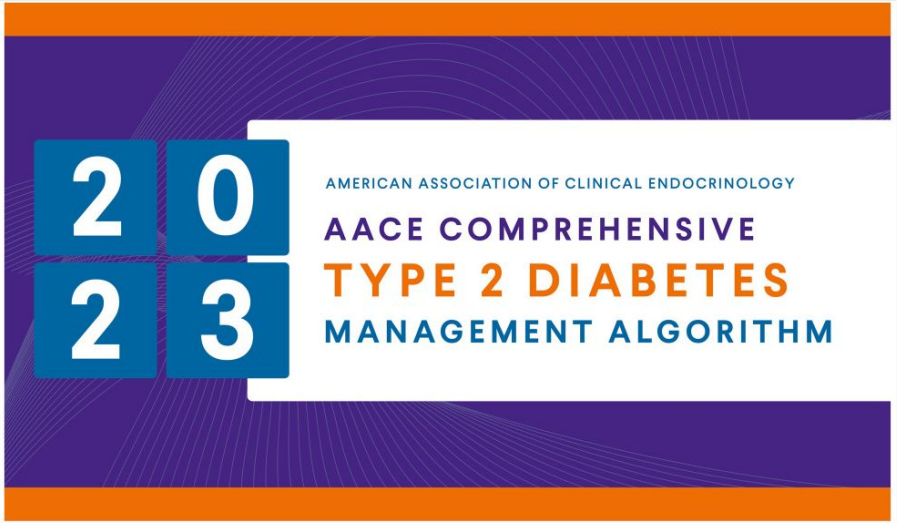
https://diabetesjournals.org/care/issue/46/Supplement_1



Diabetes Update 2023

Some Figures from American Academy of Clinical Endocrinologists (AACE), May 2023

https://www.endocrinepractice.org/article/S1530-891X(23)00034-4/fulltext



Diabetes Update 2023

What's new?

Different Sections

Standards of Medical Care in Diabetes—2023

Diabetes Updates 2023

Diabetes Update 2023

Sections to Cover Today

6. Glycemic Targets
7. CGM Devices
9. Pharmacological Treatment, type 2 DM
10. Blood Pressure Control
13. Treatment in SNF/LTC

Chat in your questions as we go through the sections so we can pause and discuss.

Glycemic Targets

Recommendations

6.1 Assess glycemic status (A1C or other glycemic measurement such as time in range or glucose management indicator) *at least* two times a year in patients who are meeting treatment goals (and who have stable glycemic control). E

6.2 Assess glycemic status at least quarterly and as needed in patients whose therapy has recently changed and/or who are not meeting glycemic goals. E

Table 6.1—Estimated average glucose (eAG)

A1C (%)	mg/dL*	mmol/L
5	97 (76–120)	5.4 (4.2–6.7)
6	126 (100–152)	7.0 (5.5–8.5)
7	154 (123–185)	8.6 (6.8–10.3)
8	183 (147–217)	10.2 (8.1–12.1)
9	212 (170–249)	11.8 (9.4–13.9)
10	240 (193–282)	13.4 (10.7–15.7)
11	269 (217–314)	14.9 (12.0–17.5)
12	298 (240–347)	16.5 (13.3–19.3)

Glycemic Targets

Recommendations

6.7 Less stringent A1C goals (such as < 8.0%) may be appropriate for patients with limited life expectancy or where the harms of treatment are greater than the benefits.

6.8 Reassess glycemic targets based on the individualized criteria.

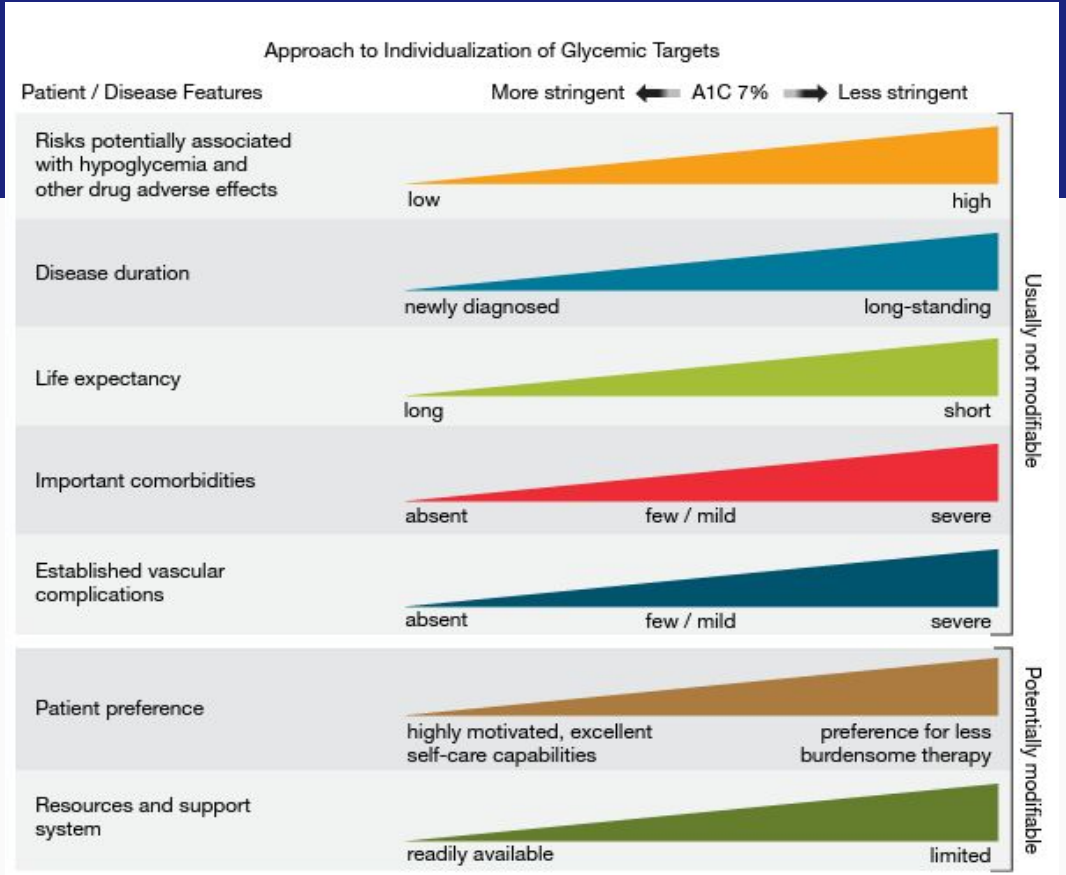


Figure 6.2—Patient and disease factors used to determine optimal glycemic targets. Characteristics and predicaments toward the left justify more stringent efforts to lower A1C; those toward the right suggest less stringent efforts. A1C 7% = 53 mmol/mol. Adapted with permission from Inzucchi et al. (71).

CGM

Table 7.3—Continuous glucose monitoring devices

Type of CGM	Description
rtCGM	CGM systems that measure and display glucose levels continuously
isCGM with and without alarms	CGM systems that measure glucose levels continuously but require scanning for visualization and storage of glucose values
Professional CGM	CGM devices that are placed on the person with diabetes in the health care professional's office (or with remote instruction) and worn for a discrete period of time (generally 7–14 days). Data may be blinded or visible to the person wearing the device. The data are used to assess glycemic patterns and trends. Unlike rtCGM and isCGM devices, these devices are clinic-based and not owned by the person with diabetes.

CGM, continuous glucose monitoring; isCGM, intermittently scanned CGM; rtCGM, real-time CGM.

7.11 - **Real-time continuous glucose monitoring A** or **intermittently scanned continuous glucose monitoring B** should be offered for diabetes management in adults with diabetes on multiple daily injections or continuous subcutaneous insulin infusion who are capable of using the devices safely (either by themselves or with a caregiver). The choice of device should be made based on the individual's circumstances, preferences, and needs.

Real-time CGMs

These systems are made up of three components: the sensor (a small wire catheter that is inserted under the skin on your arm or abdomen), a transmitter that attaches to the sensor, and a handheld receiver and/or smartphone that displays your glucose data in real time.

Intermittently scanned CGMs

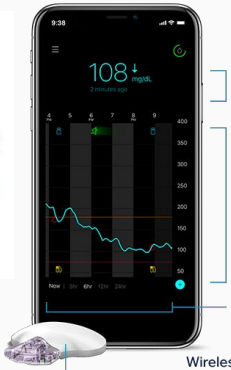
This system requires you to scan the device to get your glucose data. It uses two components: a combined glucose sensor/transmitter (inserted in your upper arm) and a separate touchscreen reader device. The sensor continuously samples and measures glucose levels, generates a new glucose value every minute, and records the reading every 15 minutes for 10 to 14 days of sensor wear time, depending on the model.

Continuous Glucose Monitoring

Real-time CGMs

These systems are made up of three components: the sensor (a small wire catheter that is inserted under the skin on your arm or abdomen), a transmitter that attaches to the sensor, and a handheld receiver and/or smartphone that displays your glucose data in real time.

SYSTEM	SYSTEM COMPONENTS	SENSOR	APPLICATOR	GLUCOSE READINGS
FreeStyle Libre 3	 Sensor + App*	 Size: 21 x 2.9mm	 One piece applicator	 Real-time glucose reading sent every minute to smartphone*
FreeStyle Libre 2	 Sensor + Reader	 Size: 30 x 5 mm	 Two piece applicator	 Scan to see glucose readings



Medtronic Guardian CGM

Intermittently scanned CGMs

This system requires you to scan the device to get your glucose data. It uses two components: a combined glucose sensor/transmitter (inserted in your upper arm) and a separate touchscreen reader device. The sensor continuously samples and measures glucose levels, generates a new glucose value every minute, and records the reading every 15 minutes for 10 to 14 days of sensor wear time, depending on the model.

CGM in LTC - Complicated

The investigators propose to conduct a randomized controlled trial to determine whether the use of Dexcom CGM with Glucose Telemetry System (CGM-GTS) with hypoglycemia alarm compared to standard of care using capillary POC testing, will facilitate diabetes treatment and reduce the risk of hypoglycemia in patients with T2D in LTC facilities. Participants in the standard of care group will also wear a CGM (blinded one).

https://classic.clinicaltrials.gov/ct2/show/NCT04818242

CGM in LTC - Medicare LCD

Local Coverage Determination (LCD)

Blood Glucose Monitoring in a Skilled Nursing Facility (SNF)

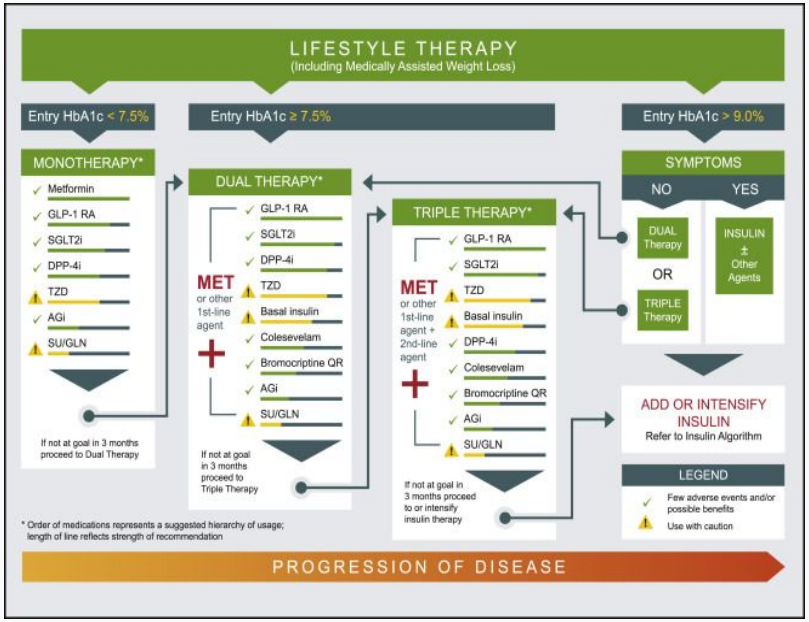
L34834

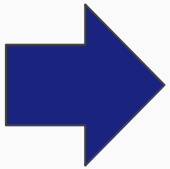
Repeated performance of finger-stick blood glucose tests to maintain standing orders for insulin injection or oral hypoglycemic agents does not meet the criteria for Part B payment in a SNF. Payment for nursing care glucose monitoring is encompassed under Medicare Part A and other payment methods. If the patient is in a skilled nursing facility, routine glucose monitoring (including any tests which are not promptly reported) is a part of routine personal care and is not a separately billed procedure (PM AB-00-108, December 2000).

The home glucose monitoring device is on the list of instruments that can be administered by providers registered under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), including providers registered with only a certificate of waiver. However, Medicare Part B may only pay for a glucose monitoring device and related disposable supplies under the durable medical equipment benefit if the equipment is used in the home or in an institution that is used as a home. A hospital or SNF is not considered a home under the SSA, Sect. 1861 (h)

https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?LCDId=34834
https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=33822 - Glucose Monitors - part B medicare, may be allowed in LTC pts

Pharmacological Treatment in T2DM





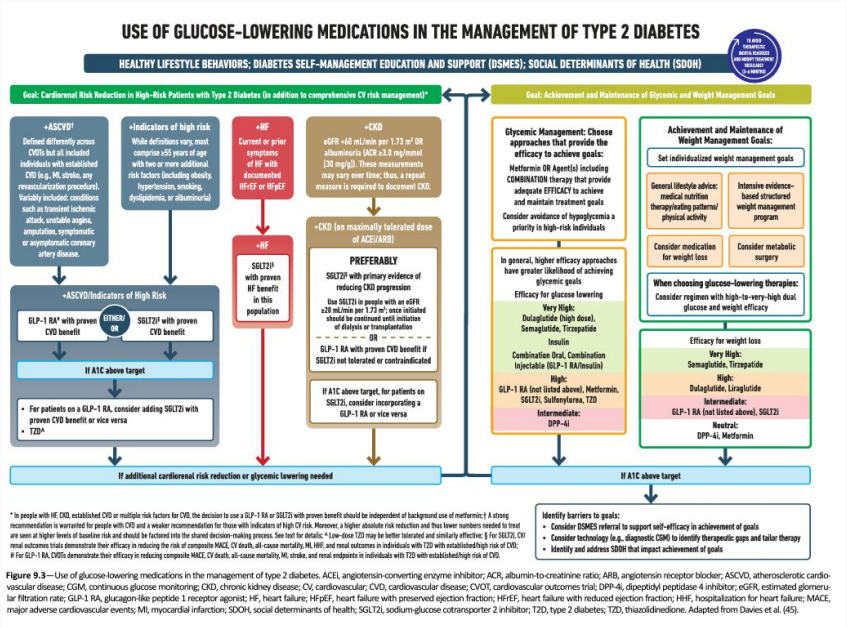


Figure 9.3—Use of glucose-lowering medications in the management of type 2 diabetes. ACEi, angiotensin-converting enzyme inhibitor; ACR, albumin-to-creatinine ratio; ARB, angiotensin receptor blocker; ASCVD, atherosclerotic cardiovascular disease; CGM, continuous glucose monitoring; CKD, chronic kidney disease; CV, cardiovascular; CVD, cardiovascular disease; CVOT, cardiovascular outcomes trial; DPP-4i, dipeptidyl peptidase 4 inhibitor; eGFR, estimated glomerular filtration rate; GLP-1 RA, glucagon-like peptide 1 receptor agonist; HF, heart failure; HFpEF, heart failure with preserved ejection fraction; HFrEF, heart failure with reduced ejection fraction; HHF, hospitalization for heart failure; MACE, major adverse cardiovascular events; MI, myocardial infarction; SDOH, social determinants of health; SGLT2i, sodium-glucose cotransporter 2 inhibitor; T2D, type 2 diabetes; TZD, thiazolidinedione. Adapted from Davies et al. (45).

2017 AACE

2023 ADA

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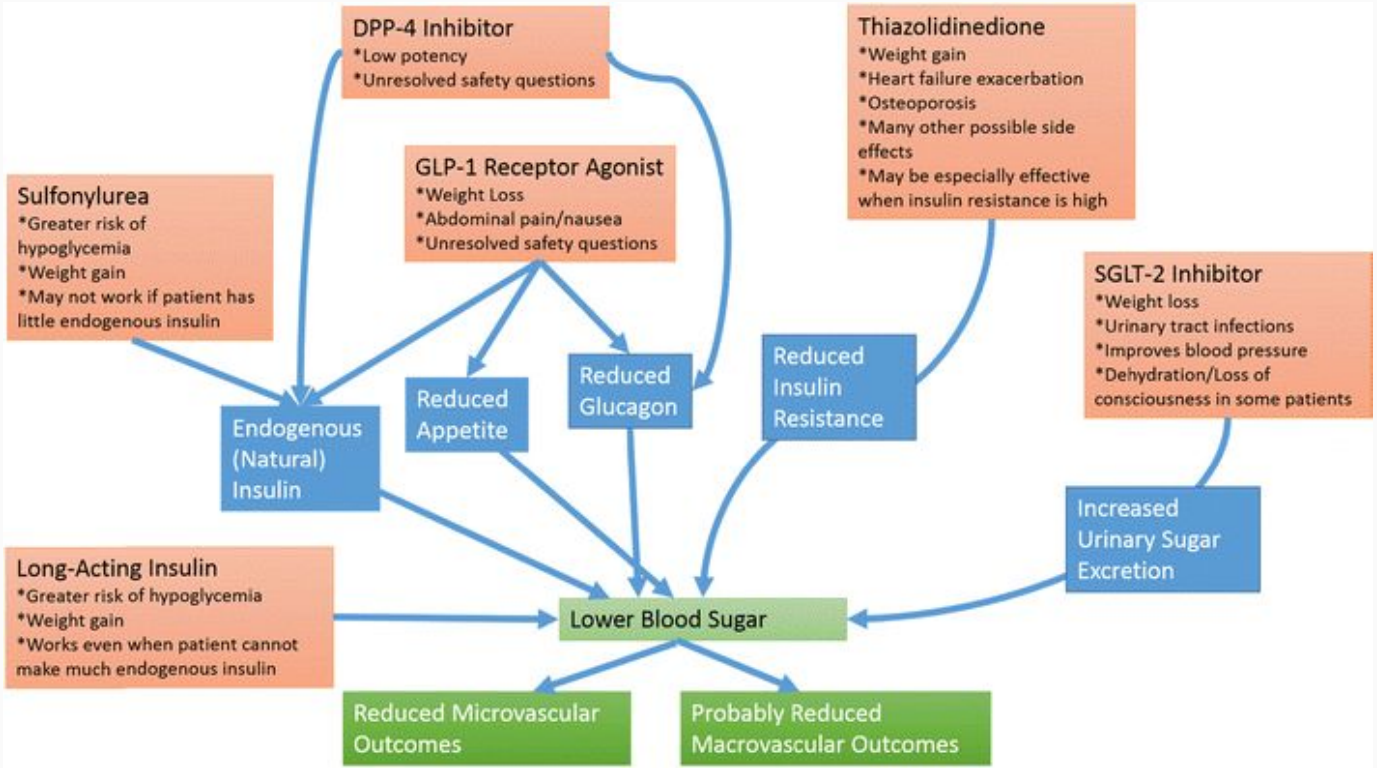
Pharmacological Treatment in T2DM



https://www.researchgate.net/figure/Major-classes-of-drugs-to-treat-type-2-diabetes-and-primary-mechanisms-of-antidiabetic_fig1_309724923

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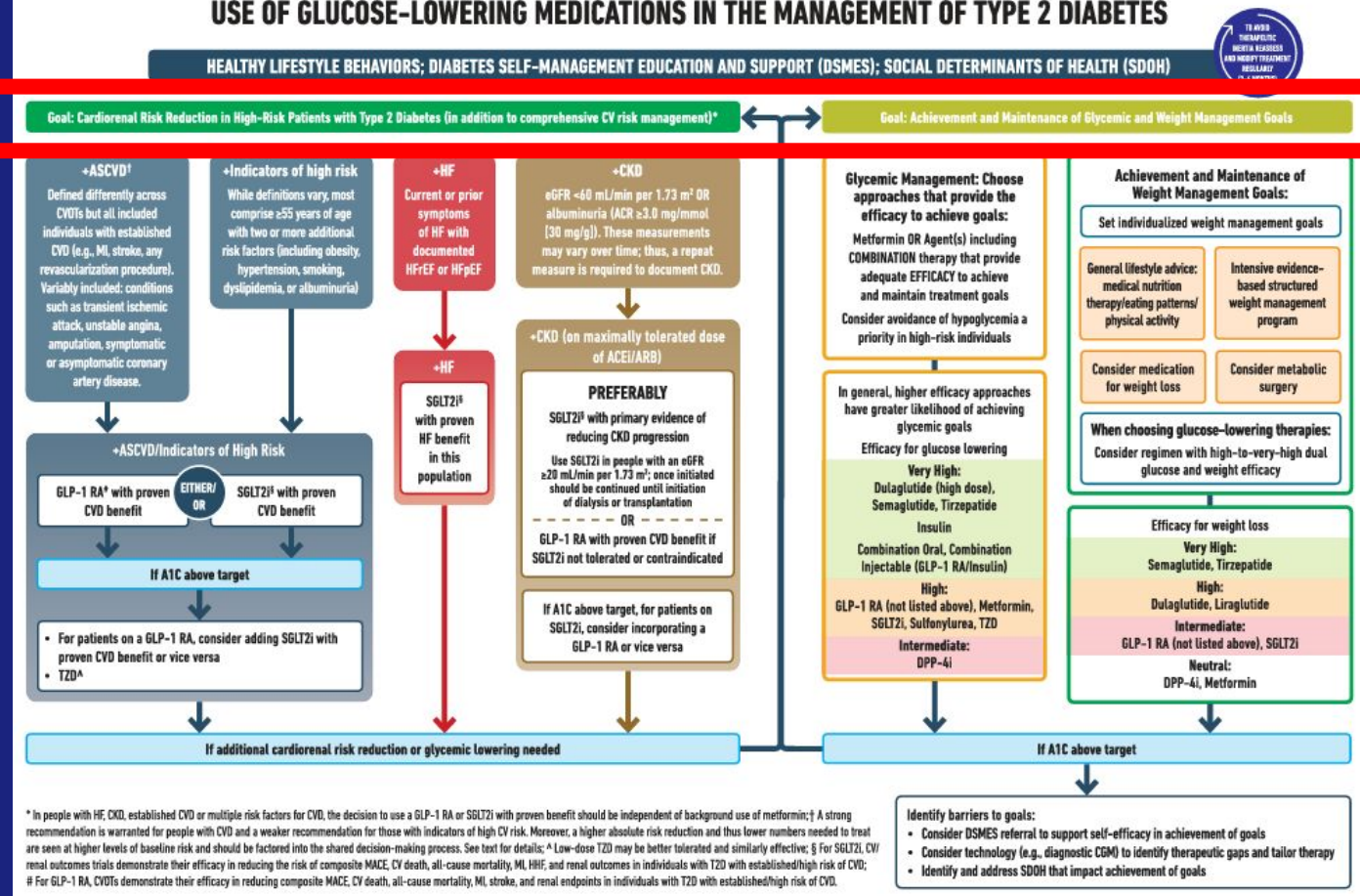
Table 9.2—Medications for lowering glucose, summary of characteristics

	Efficacy[1]	Hypoglycemia	Weight change[2]	CV effects		Renal effects		Oral/SQ	Cost	Clinical considerations
				Effect on MACE	HF	Progression of DKD	Dosing/use considerations*			
Metformin	High	No	Neutral (potential for modest loss)	Potential benefit	Neutral	Neutral	• Contraindicated with eGFR <30 mL/min per 1.73 m²	Oral	Low	• GI side effects common; to mitigate GI side effects, release formulations, and administration with food • Potential for vitamin B12 deficiency; monitor at reg
SGLT2 inhibitors	Intermediate to high	No	Loss (intermediate)	Benefit: canagliflozin, empagliflozin	Benefit: canagliflozin, dapagliflozin, empagliflozin, ertugliflozin	Benefit: canagliflozin, dapagliflozin, empagliflozin	• See labels for renal dose considerations of individual agents • Glucose-lowering effect is lower for SGLT2 inhibitors at lower eGFR	Oral	High	• DKA risk, rare in T2DM: discontinue, evaluate, and t predisposing risk factors and clinical presentation before scheduled surgery (e.g., 3–4 days), during c mitigate potential risk • Increased risk of genital mycotic infections • Necrotizing fasciitis of the perineum (Fournier gan treatment if suspected • Attention to volume status, blood pressure; adjust d
GLP-1 RAs	High to very high	No	Loss (intermediate to very high)	Benefit: dulaglutide, liraglutide, semaglutide (SQ) Neutral: exenatide once weekly, lixisenatide	Neutral	Benefit for renal endpoints in CVOTs, driven by albuminuria outcomes: dulaglutide, liraglutide, semaglutide (SQ)	• See labels for renal dose considerations of individual agents • No dose adjustment for dulaglutide, liraglutide, semaglutide • Monitor renal function when initiating or escalating doses in patients with renal impairment reporting severe adverse GI reactions	SQ; oral (semaglutide)	High	• Risk of thyroid C-cell tumors in rodents; human rel dulaglutide, exenatide extended release, semaglut • Counsel patients on potential for GI side effects an guidance on dietary modifications to mitigate GI sid eating practices [e.g., stop eating once full], decrea consider slower dose titration for patients experier • Pancreatitis has been reported in clinical trials but Discontinue if pancreatitis is suspected • Evaluate for gallbladder disease if cholelithiasis or
GIP and GLP-1 RA	Very high	No	Loss (very high)	Under investigation	Under investigation	Under investigation	• See label for renal dose considerations • No dose adjustment • Monitor renal function when initiating or escalating doses in patients with renal impairment reporting severe adverse GI reactions	SQ	High	• Risk of thyroid C-cell tumors in rodents; human rel • Counsel patients on potential for GI side effects an guidance on dietary modifications to mitigate GI sid eating practices [e.g., stop eating once full], decrea consider slower dose titration for patients experier • Pancreatitis has been reported in clinical trials but Discontinue if pancreatitis is suspected • Evaluate for gallbladder disease if cholelithiasis or
DPP-4 inhibitors	Intermediate	No	Neutral	Neutral	Neutral (potential risk, saxagliptin)	Neutral	• Renal dose adjustment required (sitagliptin, saxagliptin, alogliptin); can be used in renal impairment • No dose adjustment required for linagliptin	Oral	High	• Pancreatitis has been reported in clinical trials but Discontinue if pancreatitis is suspected • Joint pain • Bullous pemphigoid (postmarketing): discontinue i
Thiazolidinediones	High	No	Gain	Potential benefit: pioglitazone	Increased risk	Neutral	• No dose adjustment required • Generally not recommended in renal impairment due to potential for fluid retention	Oral	Low	• Congestive HF (pioglitazone, rosiglitazone) • Fluid retention (edema; heart failure) • Benefit in NASH • Risk of bone fractures • Weight gain: consider lower doses to mitigate weig
Sulfonylureas (2nd generation)	High	Yes	Gain	Neutral	Neutral	Neutral	• Glyburide: generally not recommended in chronic kidney disease • Glipizide and glimepiride: initiate conservatively to avoid hypoglycemia	Oral	Low	• FDA Special Warning on increased risk of CV mortali (tolbutamide); glimepiride shown to be CV safe (see • Use with caution in persons at risk for hypoglycemi
Insulin Human	High to very high	Yes	Gain	Neutral	Neutral	Neutral	• Lower insulin doses required with a decrease in eGFR; titrate per clinical response	SQ; inhaled	Low (SQ)	• Injection site reactions • Higher risk of hypoglycemia with human insulin (NI
Analogs								SQ	High	

CV, cardiovascular; CVOT, cardiovascular outcomes trial; DKA, diabetic ketoacidosis; DKD, diabetic kidney disease; DPP-4, dipeptidyl peptidase 4; eGFR, estimated glomeru U.S. Food and Drug Administration; GI, gastrointestinal; GIP, gastric inhibitory polypeptide; GLP-1 RA, glucagon-like peptide 1 receptor agonist; HF, heart failure; NASH, non MACE, major adverse cardiovascular events; SGLT2, sodium–glucose cotransporter 2; SQ, subcutaneous; T2DM, type 2 diabetes mellitus. *For agent-specific dosing recom to manufacturers' prescribing information. [1]Tsapas et al. (62). [2]Tsapas et al. (114). Reprinted from Davies et al. (45).

Class	Compound(s)	Dosage strength/ product (if applicable)
Biguanides	• Metformin	850 mg (IR) 1,000 mg (IR) 1,000 mg (ER)
Sulfonylureas (2nd generation)	• Glimepiride • Glipizide • Glyburide	4 mg 10 mg (IR) 10 mg (XL/ER) 6 mg (micronized) 5 mg
Thiazolidinedione	• Pioglitazone	45 mg
α-Glucosidase inhibitors	• Acarbose • Miglitol	100 mg 100 mg
Meglitinides	• Nateglinide • Repaglinide	120 mg 2 mg
DPP-4 inhibitors	• Alogliptin • Saxagliptin • Linagliptin • Sitagliptin	25 mg 5 mg 5 mg 100 mg
SGLT2 inhibitors	• Ertugliflozin • Dapagliflozin • Canagliflozin • Empagliflozin	15 mg 10 mg 300 mg 25 mg
GLP-1 RAs	• Exenatide (extended release) • Exenatide • Dulaglutide • Semaglutide • Liraglutide • Lixisenatide	2 mg powder for suspension or pen 10 μg pen 4.5 mg mL pen 1 mg pen 14 mg (tablet) 1.8 mg pen 20 μg pen
GLP-1/GIP dual agonist	• Tirzepatide	15 mg pen
Bile acid sequestrant	• Colesevelam	625 mg tabs 3.75 g suspension
Dopamine-2 agonist	• Bromocriptine	0.8 mg
Amylin mimetic	• Pramlintide	120 μg pen

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



* In people with HF, CKD, established CVD or multiple risk factors for CVD, the decision to use a GLP-1 RA or SGLT2i with proven benefit should be independent of background use of metformin; † A strong recommendation is warranted for people with CVD and a weaker recommendation for those with indicators of high CV risk. Moreover, a higher absolute risk reduction and thus lower numbers needed to treat are seen at higher levels of baseline risk and should be factored into the shared decision-making process. See text for details; ^ Low-dose TZD may be better tolerated and similarly effective; § For SGLT2i, CV/renal outcomes trials demonstrate their efficacy in reducing the risk of composite MACE, CV death, all-cause mortality, MI, HHF, and renal outcomes in individuals with T2D with established/high risk of CVD; # For GLP-1 RA, CVOTs demonstrate their efficacy in reducing composite MACE, CV death, all-cause mortality, MI, stroke, and renal endpoints in individuals with T2D with established/high risk of CVD.

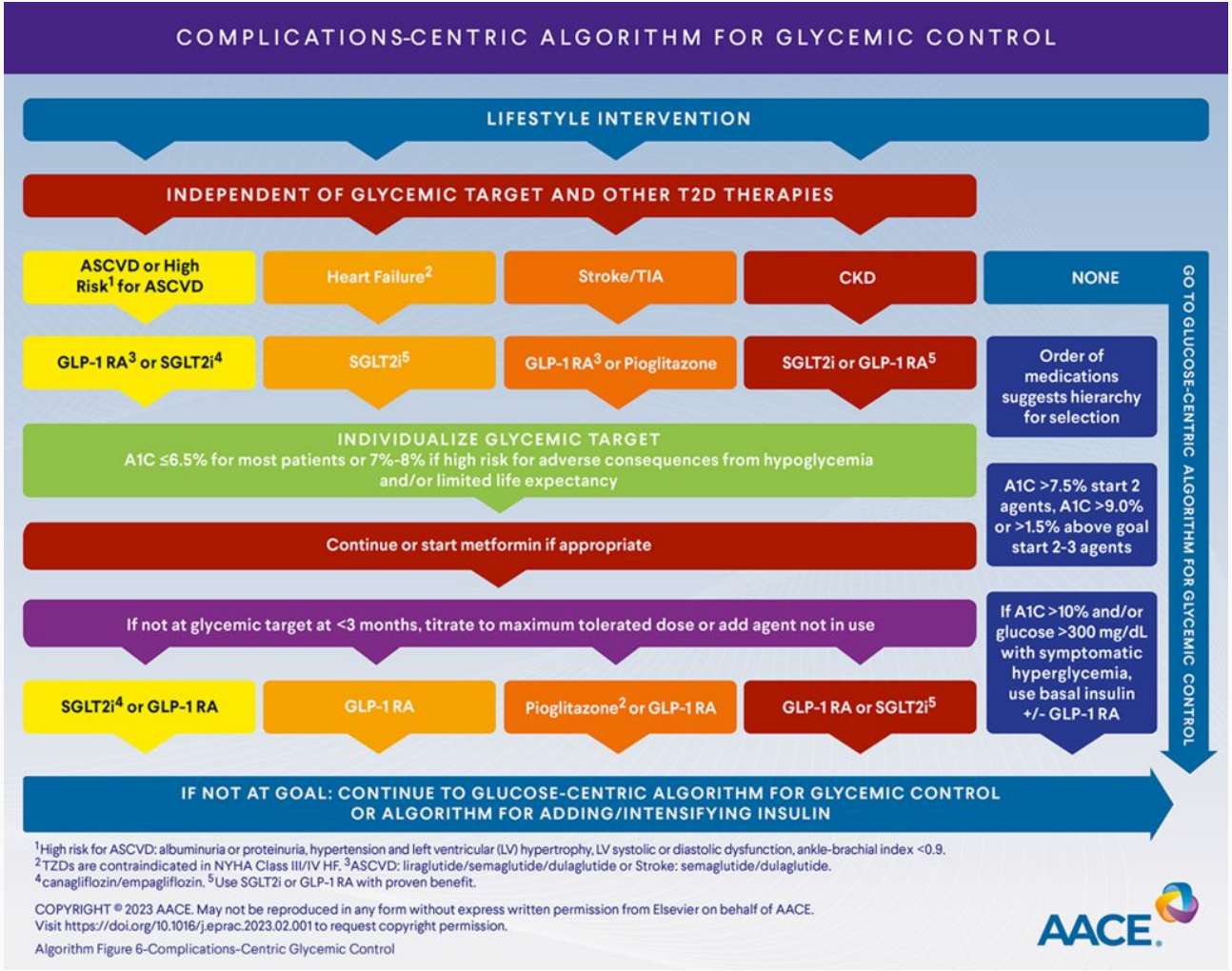
Figure 9.3—Use of glucose-lowering medications in the management of type 2 diabetes. ACEi, angiotensin-converting enzyme inhibitor; ACR, albumin-to-creatinine ratio; ARB, angiotensin receptor blocker; ASCVD, atherosclerotic cardiovascular disease; CGM, continuous glucose monitoring; CKD, chronic kidney disease; CV, cardiovascular; CVD, cardiovascular disease; CVOT, cardiovascular outcomes trial; DPP-4i, dipeptidyl peptidase 4 inhibitor; eGFR, estimated glomerular filtration rate; GLP-1 RA, glucagon-like peptide 1 receptor agonist; HF, heart failure; HFpEF, heart failure with preserved ejection fraction; HFrEF, heart failure with reduced ejection fraction; HHF, hospitalization for heart failure; MACE, major adverse cardiovascular events; MI, myocardial infarction; SDOH, social determinants of health; SGLT2i, sodium-glucose cotransporter 2 inhibitor; T2D, type 2 diabetes; TZD, thiazolidinedione. Adapted from Davies et al. (45).

AACE 2023 Algorithms

Let's look at a different way to display this

- Complication-Centric Algorithm for Glycemic Control
- Glucose-Centric Algorithm for Glycemic Control
- Algorithm for Adding/Intensifying Insulin

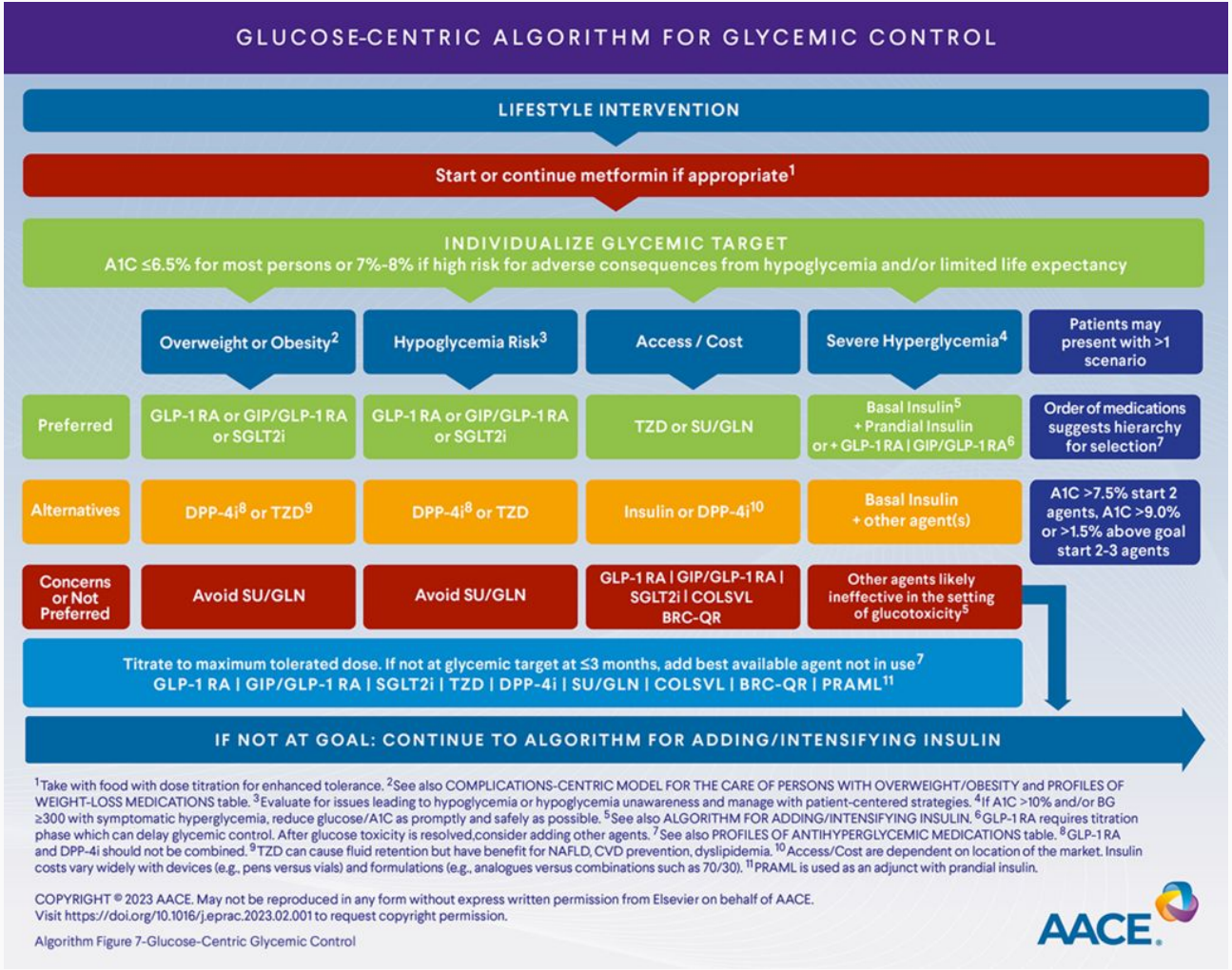
Lipid and HTN management



[1]High risk for ASCVD: albuminuria or proteinuria, hypertension and left ventricular (LV) hypertrophy, LV systolic or diastolic dysfunction, ankle-brachial index <0.9.
[2]TZDs are contraindicated in NYHA Class III/IV HF. [3]ASCVD: liraglutide/semaglutide/dulaglutide or Stroke: semaglutide/dulaglutide.
[4]canagliflozin/empagliflozin. [5]Use SGLT2i or GLP-1 RA with proven benefit.

Algorithm Figure 6-Complications-Centric Glycemic Control

Class	Compound(s)	Dosage strength/ product (if applicable)
Biguanides	• Metformin	850 mg (IR) 1,000 mg (IR) 1,000 mg (ER)
Sulfonylureas (2nd generation)	• Glimepiride • Glipizide • Glyburide	4 mg 10 mg (IR) 10 mg (XL/ER) 6 mg (micronized) 5 mg
Thiazolidinedione	• Pioglitazone	45 mg
α-Glucosidase inhibitors	• Acarbose • Miglitol	100 mg 100 mg
Meglitinides	• Nateglinide • Repaglinide	120 mg 2 mg
DPP-4 inhibitors	• Alogliptin • Saxagliptin • Linagliptin • Sitagliptin	25 mg 5 mg 5 mg 100 mg
SGLT2 inhibitors	• Ertugliflozin • Dapagliflozin • Canagliflozin • Empagliflozin	15 mg 10 mg 300 mg 25 mg
GLP-1 RAs	• Exenatide (extended release) • Exenatide • Dulaglutide • Semaglutide • Liraglutide • Lixisenatide	2 mg powder for suspension or pen 10 µg pen 4.5 mg mL pen 1 mg pen 14 mg (tablet) 1.8 mg pen 20 µg pen
GLP-1/GIP dual agonist	• Tirzepatide	15 mg pen
Bile acid sequestrant	• Colesevelam	625 mg tabs 3.75 g suspension
Dopamine-2 agonist	• Bromocriptine	0.8 mg
Amylin mimetic	• Pramlintide	120 µg pen

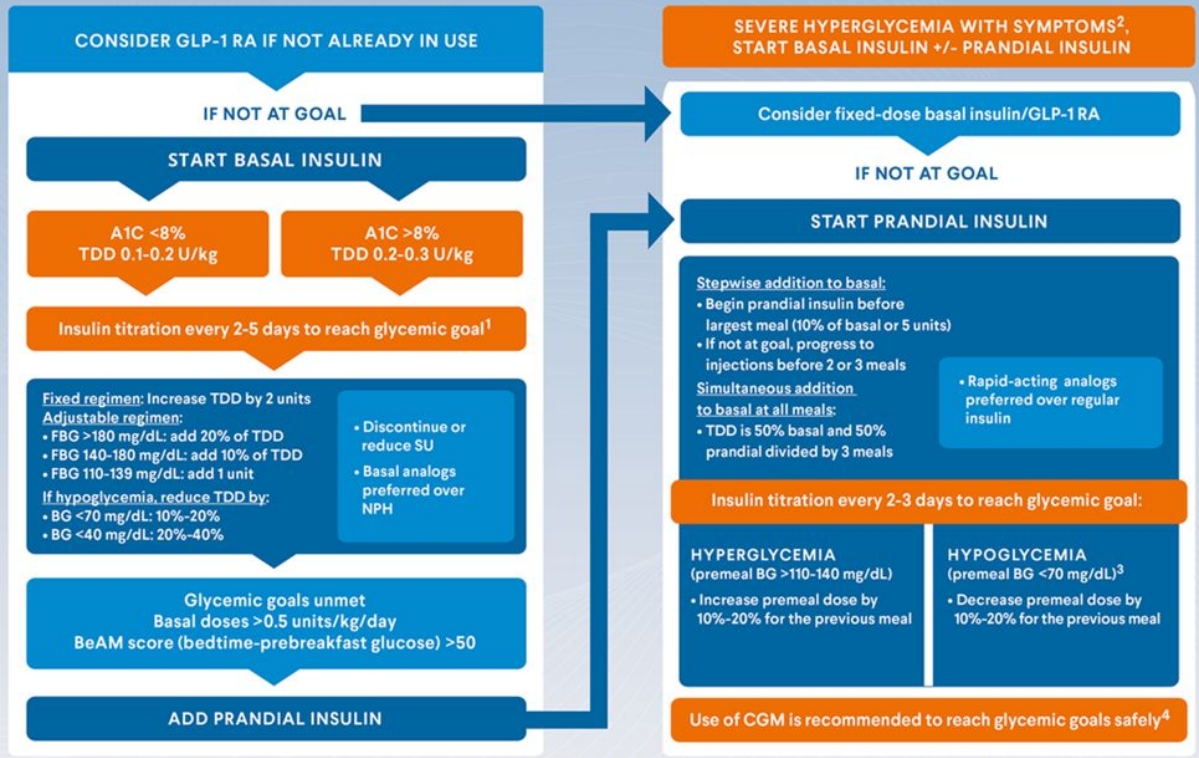


[1]Take with food with dose titration for enhanced tolerance. [2]See also COMPLICATIONS-CENTRIC MODEL FOR THE CARE OF PERSONS WITH OVERWEIGHT/OBESITY and PROFILES OF WEIGHT-LOSS MEDICATIONS table. [3]Evaluate for issues leading to hypoglycemia or hypoglycemia unawareness and manage with patient-centered strategies. [4]If A1C >10% and/or BG ≥300 with symptomatic hyperglycemia, reduce glucose/A1C as promptly and safely as possible. [5]See also ALGORITHM FOR ADDING/INTENSIFYING INSULIN. [6]GLP-1 RA requires titration phase which can delay glycemic control. After glucose toxicity is resolved,consider adding other agents. [7]See also PROFILES OF ANTIHYPERGLYCEMIC MEDICATIONS table. [8]GLP-1 RA and DPP-4i should not be combined. [9]TZD can cause fluid retention but have benefit for NAFLD, CVD prevention, dyslipidemia. [10]Access/Cost are dependent on location of the market. Insulin costs vary widely with devices (e.g., pens versus vials) and formulations (e.g., analogues versus combinations such as 70/30). [11]PRAML is used as an adjunct with prandial insulin.

Algorithm Figure 7-Glucose-Centric Glycemic Control

Class	Compound(s)	Dosage strength/ product (if applicable)
Biguanides	• Metformin	850 mg (IR) 1,000 mg (IR) 1,000 mg (ER)
Sulfonylureas (2nd generation)	• Glimepiride • Glipizide • Glyburide	4 mg 10 mg (IR) 10 mg (XL/ER) 6 mg (micronized) 5 mg
Thiazolidinedione	• Pioglitazone	45 mg
α-Glucosidase inhibitors	• Acarbose • Miglitol	100 mg 100 mg
Meglitinides	• Nateglinide • Repaglinide	120 mg 2 mg
DPP-4 inhibitors	• Alogliptin • Saxagliptin • Linagliptin • Sitagliptin	25 mg 5 mg 5 mg 100 mg
SGLT2 inhibitors	• Ertugliflozin • Dapagliflozin • Canagliflozin • Empagliflozin	15 mg 10 mg 300 mg 25 mg
GLP-1 RAs	• Exenatide (extended release) • Exenatide • Dulaglutide • Semaglutide • Liraglutide • Lixisenatide	2 mg powder for suspension or pen 10 μg pen 4.5 mg mL pen 1 mg pen 14 mg (tablet) 1.8 mg pen 20 μg pen
GLP-1/GIP dual agonist	• Tirzepatide	15 mg pen
Bile acid sequestrant	• Colesevelam	625 mg tabs 3.75 g suspension
Dopamine-2 agonist	• Bromocriptine	0.8 mg
Amylin mimetic	• Pramlintide	120 μg pen

ALGORITHM FOR ADDING/INTENSIFYING INSULIN



[1]Glycemic goals: A1C ≤6.5%-7% without hypoglycemia, fasting and premeal glucose <110 mg/dL, A1C should be individualized in people with comorbidities and at high adverse consequences of hypoglycemia and/or limited life expectancy. Longer-acting basal insulins (e.g., glargine U300, degludec U100 or U200) require slower titration ≥3 days because of a longer time to steady state. [2]For symptomatic hyperglycemia with A1C >10% and/or BG ≥300 mg/dL, reduce glucose/A1C as promptly and safely as possible. Consider testing for autoimmune diabetes. GLP-1 RA requires titration phase which can delay glycemic control. [3]Oral administration of rapidly absorbed source of glucose (tablet, fruit juice) if person can safely swallow. If unresponsive or unable to swallow, subcutaneous/intramuscular/intranasal glucagon or glucagon analogue can be given by a trained member of the household. [4]See also American Association of Clinical Endocrinology Clinical Practice Guideline: The Use of Advanced Technology in the Management of Persons with Diabetes Mellitus.

Algorithm Figure 8-Adding/Intensifying Insulin

ASCVD RISK REDUCTION ALGORITHM: DYSLIPIDEMIA

ASSESS LIPID PANEL (LDL-C, HDL-C, Non-HDL-C, TG, Apo B)[1]

LIFESTYLE INTERVENTION: increase ↑ dietary fiber | ↑ healthy fat | ↓ saturated fat | ↓ simple carbs | ↓ added sugars | ↑ physical activity | weight management

PREDIABETES OR T2D + RISK FACTORS: USE ASCVD 10-YEAR RISK CALCULATOR
Major ASCVD Risk Factors: Age >40 | HTN | CKD >3a | Smoking | Family History of Premature ASCVD | Low HDL-C | High Non-HDL-C

INITIATE STATIN THERAPY

	HIGH RISK <10% T2D <10 years <2 other risk factors No target organ damage	VERY HIGH RISK 10%-20% T2D >10 years Age >40 years No ASCVD No target organ damage ≥2 additional risk factors	EXTREME RISK >20% T2D & ASCVD Severe target organ damage: eGFR <45 mL/min/1.73 m^2, UACR >300, ABI <0.9, LV systolic/diastolic dysfunction
	Moderate-intensity statin	High-intensity statin	
GOAL LDL-C (mg/dL)	<100	<70	<55
GOAL Non-HDL-C (mg/dL)	<130	<100	<80
GOAL TG (mg/dL)	<150	<150	<150
GOAL Apo B (mg/dL)	<90	<80	<70

Monitor and titrate therapy every 3-6 months to achieve lipid targets according to risk[2]

Intensify statin and lifestyle & optimize glycemic control

Add ezetimibe

Consider additional therapy: bile acid sequestrant, bempedoic acid, PCSK9 inhibitor, inclisiran

HYPERTRIGLYCERIDEMIA MANAGEMENT:

TG 135-199 | **TG 200-499[3]** | **TG ≥500** | **TG >1000[4]**

Intensify Lifestyle & Achieve Glycemic Targets

If TG >135: Consider addition of icosapent ethyl to statin if DM and CVD or ≥2 risk factors

Fibrate or/and Rx Grade Omega-3

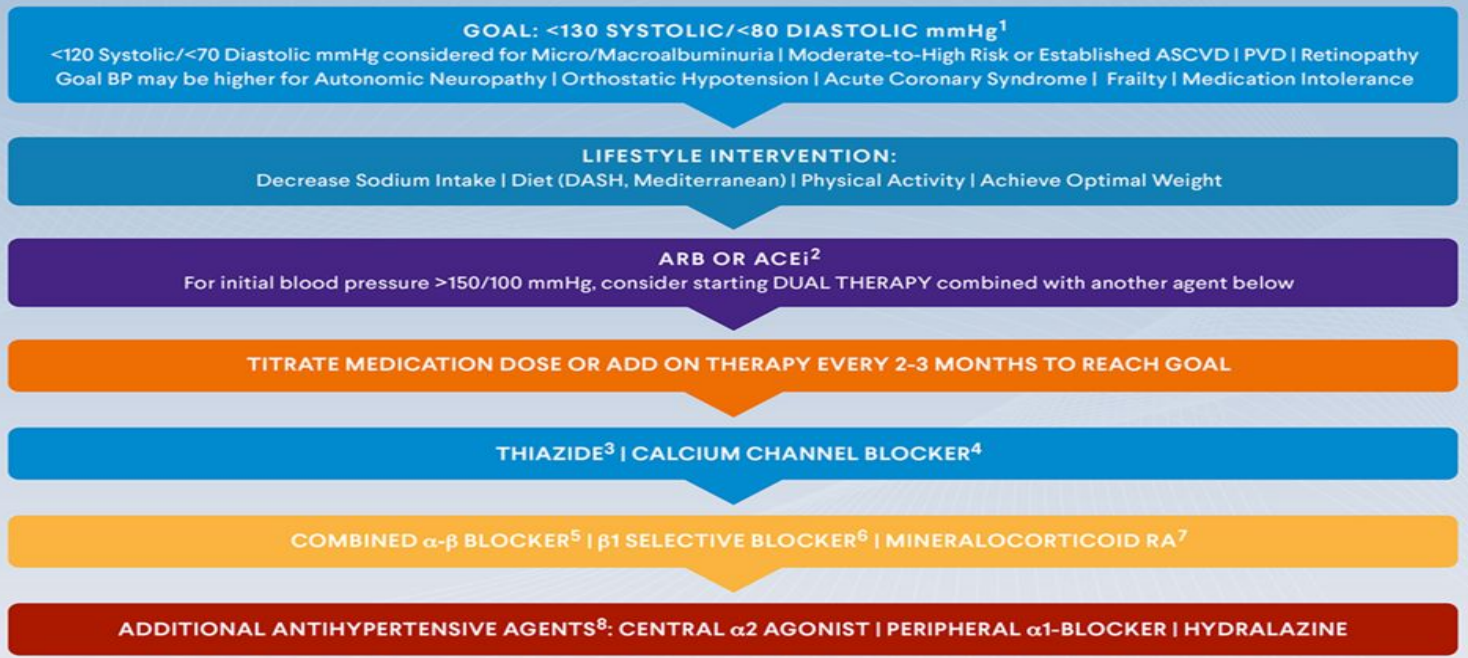
TG target achieved: Continue lifestyle therapy, maximally tolerated statin and achieve glucose targets

+Niacin[5]

[1] Baseline LDL-C >190 mg/dL, consider familial hypercholesterolemia. [2] Statin intolerance: Use alternative statin with lower incidence of myopathy (pitavastatin, extended-release fluvastatin) or decrease dose/frequency, use non-statin Rx, check for Rx interactions, consider CoQ10. [3] If TG >200 and HDL <40, add fibrate/omega-2 to achieve apo B and non-HDL goals. [4] Elevated triglycerides >500 mg/dL to >1000 mg/dL can cause acute pancreatitis. Urgent intervention with dietary management and fibrate/omega 3 therapy is needed. Suspect familial chylomicronemia syndrome or lipodystrophy, refer to lipid specialist. [5] For severe hypertriglyceridemia >1000 refractory to previous interventions, consider niacin to reduce the risk of pancreatitis. Niacin may lower TG and Lp(a) but does not reduce ASCVD and can promote hyperglycemia.

Algorithm Figure 4-Dyslipidemia

ASCVD RISK REDUCTION ALGORITHM: HYPERTENSION



[1]Consider patient-specific characteristics DKD, retinopathy, ASCVD, post-MI, CHF, age, and race. [2]ACEi and ARB reduce progression of DKD. Use as first line for UACR >30 mg/g. Thiazide or CCB may also be appropriate as first line in absence of albuminuria. ACEi and ARB should not be used concomitantly. Rule out pregnancy. [3]Chlorthalidone, indapamide, hydrochlorothiazide. [4]Non-dihydropyridine amlodipine or nifedipine unless indication for dihydropyridine. [5]Carvedilol, labetalol, dilevalol. [6]Nebivolol, betaxolol. [7]Resistant hypertension with >140/90 mmHg if on ≥3 agents including maximum dose diuretic; laboratory evaluation for hyperaldosteronism is indicated. Increase laboratory monitoring for combination of ACEi or ARB with MRA due to risk of hyperkalemia or AKI. Finerenone is recommended for persons with CKD associated with diabetes and eGFR ≥25 mL/min/1.73m^2 and UACR ≥30 mg/g. [8]Initiation of SGLT2i or GLP-1 RA also may mildly lower BP.

Algorithm Figure 5-Hypertension

AACE

Treatment in SNF/LTC: Gluc/BP/Lipids

Table 13.1—Framework for considering treatment goals for glycemia, blood pressure, and dyslipidemia in older adults with diabetes

Patient characteristics/ health status	Rationale	Reasonable A1C goal‡	Fasting or preprandial glucose	Bedtime glucose	Blood pressure	Lipids
Healthy (few coexisting chronic illnesses, intact cognitive and functional status)	Longer remaining life expectancy	<7.0–7.5% (53–58 mmol/mol)	80–130 mg/dL (4.4–7.2 mmol/L)	80–180 mg/dL (4.4–10.0 mmol/L)	<130/80 mmHg	Statin, unless contraindicated or not tolerated
Complex/intermediate (multiple coexisting chronic illnesses* or two or more 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)	<130/80 mmHg	Statin, unless contraindicated or not tolerated
Very complex/poor health (LTC or end-stage chronic illnesses** or moderate-to-severe cognitive impairment or two or more ADL impairments)	Limited remaining life expectancy makes benefit uncertain	Avoid reliance on A1C; glucose control decisions should be based on avoiding hypoglycemia and symptomatic hyperglycemia	100–180 mg/dL (5.6–10.0 mmol/L)	110–200 mg/dL (6.1–11.1 mmol/L)	<140/90 mmHg	Consider likelihood of benefit with statin

Treatment in SNF/LTC

Recommendations (E expert consensus or clinical experience**)**

13.20 Consider diabetes education for the staff of long-term care (LTC) and rehabilitation facilities to improve the management of older adults with diabetes. **E**

13.21 People with diabetes residing in LTC facilities need careful assessment to establish individualized glycemic goals and to make appropriate choices of glucose-lowering agents based on their clinical and functional status. **E**

13.22 Consider use of CGM to assess risk for hypoglycemia in older adults treated with sulfonylureas or insulin. **E**

Older adults in LTC may have irregular and unpredictable meal consumption, undernutrition, anorexia, or impaired swallowing. Meals tailored to patients' culture, preferences, and personal goals may increase QoL, satisfaction with meals, and nutrition status. It may be helpful to give insulin after meals to ensure that the dose is appropriate for the amount of carbohydrate consumed in the meal.

https://diabetesjournals.org/clinical/article/41/1/4/148029/Standards-of-Care-in-Diabetes-2023-Abridged-for

Virginia Medicaid Formulary

	Diabetes: Injectable Hypoglycemics
GLP-1	Byetta®
	Humalog Cartridge & Vial & Pen
	Humalog Kwikpen 100 unit/ml
	Humalog Junior Kwikpen
	Humalog Mix 50/50 vial & Humalog Mix 75/25 vial
	Humulin 500 U/M pen/vial
	Humulin® 70/30 pen/vial (OTC)
	Humulin® N pen/vial (OTC)
	Humulin® R pen/vial
	insulin lispro vial
	insulin lispro protamine mix kwikpen
	insulin lispro Jr. Kwikpen
	insulin lispro Pen
	insulin aspart cartridge pen/vial
	insulin aspart/insulin aspart protamine insulin pen
	insulin aspart/insulin aspart protamine vial
	Lantus® Solostar® and vial
	Levemir®pen/vial
	Novolog® cartridge
	Novolog® Flexpen/vial
GLP-1	Trulicity™
GLP-1	Victoza®

	Diabetes: Oral Hypoglycemics
	acarbose
SGLT2	FaRxiga™
	glimepiride
	glipizide IR & ER
	glyburide & micronized
	glyburide/metformin
	Invokamet
	Invokamet XR
SGLT2	Invokana™
	Janumet® & Janumet XR®
DPP4	Januvia®
SGLT2	Jardiance®
	Jentadueto™
	metformin & metformin ER
	nateglinide
	pioglitazone
	repaglinide
	Synjardy®
DPP4	Tradjenta™
	Xigduo™ XR

Weight Management Agents
Contrave
orlistat
Qsymia
Saxenda SQ
Xenical
Wegovy SQ

Contrave - naltrexone/bupropion
Orlistat / Xenical - lipase inhibitor
Qsymia - phentermine/topiramate
Saxenda SQ - Victoza, liraglutide, GLP1
Wegovy SQ - Ozempic, semaglutide, GLP1

https://www.virginiamedicaidpharmacyservices.com/provider/external/medicaid/vamps/doc/en-us/VAmed-PDLquick-20230101.pdf Jan 1 2023

Bergman Panel Review

Bergman Patients			
Facility 1		Facility 2	
29 pts		47 pts	
20 pts SNF + 9 pts LTC		7 pts SNF + 40 pts LTC	
insulin + metformin	4	insulin + metformin	2
insulin only	2	insulin only	1
DPP4	1	DPP4	
GLP1	1	GLP1	
SGLT2	1	SGLT2	1
metformin	1	metformin	

What does your panel look like?

Shouldn't I update my treatment approach?

Insulin only seems out of date, right?

What are YOU doing?

Open Forum

Share an idea. Anything you need help with? What's new in your Virginia Health District? Any announcements?

VA LTC-CN Share Resources or Announcements

1. Vaccination Resources
   https://www.ahcancal.org/Quality/Pages/GetVaccinated.aspx

2. How was VAMDA?

3. Any conferences people have anything to share about?

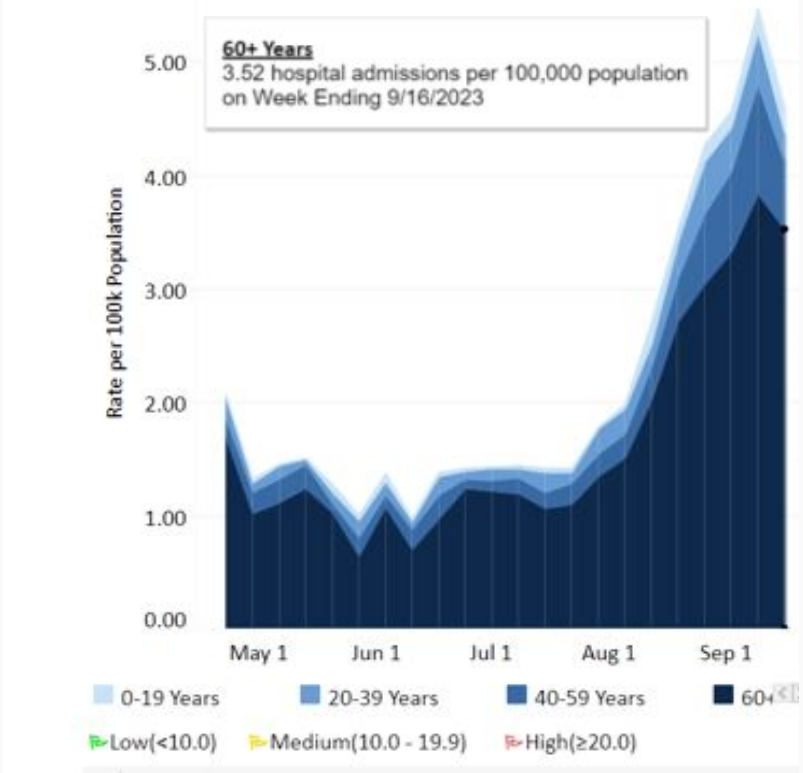
Updates COVID-19

COVID-19:
Data, Treatment, Vaccines

No new therapeutics. New vaccines are approved and out.
Any news on your local vaccines?
Please speak up or add to chat.

As announced September 12 the new **COVID vaccines** (Moderna and Pfizer) are recommended for those over 6 months of age. They may be given with RSV and Flu vaccines in separate doses separated by an inch or more. Don't forget the pneumococcal vaccine also!

Hospital Admissions >60 yo
May1 - Sept. 16, 2023



Hospital Bed Use for COVID-19 Up but still LOW

Hospital Beds In Use

This measure looks at the average number of inpatient beds in use for COVID-19 for a given week. This can help determine how COVID-19 is impacting total hospital capacity.

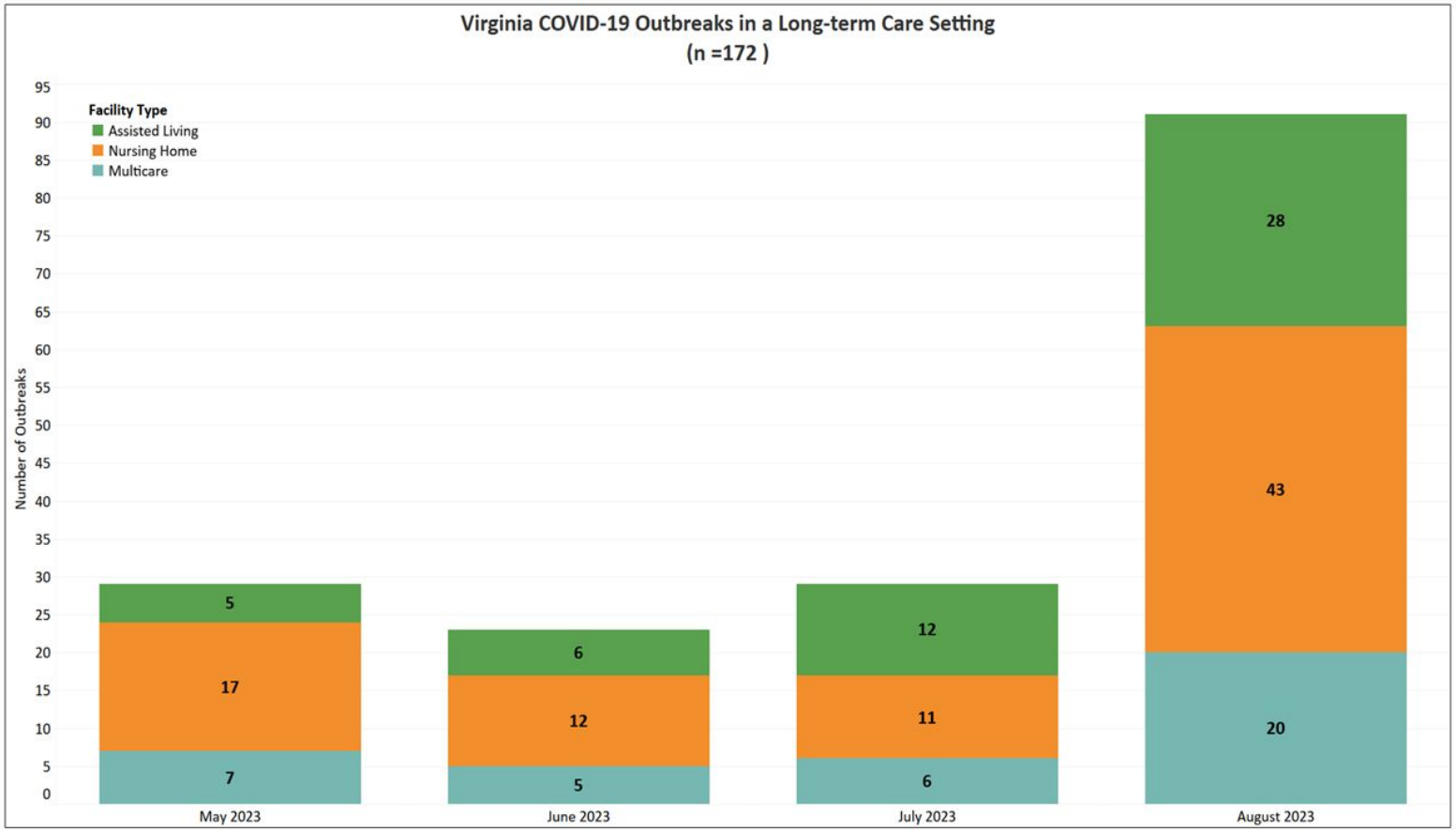
2.21 percent of inpatient beds in use for COVID-19 for the week ending 09/16/2023

4 week trend in percent of total inpatient beds used by COVID-19 patients

11.1% points higher than the previous week ending 09/09/2023

% Beds Occupied by Patients with COVID-19 is **Low**

Va COVID-19 Outbreaks May-August 2023 (Note decrease from previous data)



Facility Type
Assisted Living
Nursing Home
Multicare

COVID-19

In the month of August, there were 105 COVID-19 outbreaks reported from Virginia long-term care facilities:

- 28 from assisted living facilities
- 43 from nursing homes
- 20 from multicare facilities

Virginia Department of Health (VDH) COVID-19 Dashboards updated September 16

Vaccines are still free of charge to recipients (no charge or copay), but can seek reimbursement from private insurance, Medicare or Medicaid. *** check with facility pharmacy for details

Vaccination Program Provider Agreement

Share with colleagues in chat: Have you started your vaccination clinics for flu, RSV and COVID?

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Thank you for joining! Evaluation will pop up-

Next Newsletter - coming to you October 11.

Next Monthly Forum - **October 18 at 4pm**. Scroll down in the Zoom registration confirmation email you received for a calendar link you can use to update your calendar automatically with the Zoom link for future meetings.

On your way out of Zoom, kindly answer a 3-question feedback survey.

Stay in touch! Email us at ltccn@vcu.edu

Invite your colleagues! They can register at ltccn.vcu.edu

Disclosures

The speakers and presenters for today have no relevant financial conflicts of interest.

*Funding Disclosure: This work is supported by the **Virginia Department of Health, Office of Epidemiology, Division of Healthcare-Associated Infections (HAI) and Antimicrobial Resistance (AR) Program** and the Centers for Disease Control and Prevention, Epidemiology and Laboratory Capacity (ELC) Program under federal award number NU50CK000555 and state subrecipient number VCULTC603-GY23 in the amount of $820,002. The content presented is solely the responsibility of the authors and does not necessarily represent the official views of the Centers for Disease Control, the Virginia Department of Health, or Virginia Commonwealth University.*

Virginia Long-Term Care Infrastructure Pilot Project (VLIPP) funding will be utilized in nursing homes and long-term care facilities to assist with the ongoing COVID-19 response and to bolster preparedness for emerging infections. The projects are based on identified needs that align with funding objectives