Type 2 Diabetes Mellitus Primary Care Management

Document Title: Type 2 Diabetes Mellitus Primary Care Management		
Index #: HLN.P.014	Created by: Adult Leader Committee	Approved by: Adult Leader Committee and QCCC
Effective Date: 3/1/2018	Last Revision date: 11/30/2021	Last Review Date: 9/20/2024
Supporting Documents: HCC Diabetes Education		Next Review Date: 10/01/2025

The HLN Type 2 Diabetes clinical standard has been developed to promote evidence-based medical management and quality of life for patients diagnosed with Type 2 Diabetes. In conjunction with the clinical standard, our population health focus remains on ensuring individual treatment decisions, integrated long-term treatment approaches, facilitation of team-based care, decision support tools, and use of data metrics with attention to care costs.

Type 2 Diabetes Lifestyle Management Strategies:

I. Increase diabetic awareness and encourage lifestyle modifications such as:
- Healthy diet
- Healthy BMI/Weight management (5%-10% weight loss is beneficial in glycemic control, lipids, and blood pressure control)
- Regular exercise as tolerated
- Tobacco/E-Cigarette cessation
- Avoiding excess alcohol intake

II. Provide patients with self-management education and support to aid in preventing acute complications as well as reducing the risk of long-term complications.

III. Consider the importance in screening the following areas to address medical & psychosocial risk factors:
- Social Determinants of Health [food insecurity; housing insecurity, financial barriers, and social/community support]
- Annual Depression Screening
- Annual Eye Exam
- Annual comprehensive foot exam, educate on daily foot care use "**.DMFOOTEXAM**" to satisfy care gap
- "**.HLNDMINFO**" to bring all Diabetes information into the patients note

IV. Consider adjusting treatment goals in older adults based on poor performance status, advanced age, or significant risk for hypoglycemia

V. Technology Integration with use of continuous glucose monitors (CGMs) and insulin pumps. Utilize these devices to tailor treatments and improve glucose management when available

Best Practice Recommendations from HLN Providers:

I. A minimum of 2 visits per year for chronic disease management, schedule follow up appointments after each clinic visit
II. Re-evaluate treatment goals, preferences, and medication adherence every 3-6 months.
III. If A1C is greater than 9 follow blood glucose levels closely every 6 weeks for 3 months **or** until A1C is at goal
IV. Prescribe medications at 90-day supply for 6 months or less depending on HgbA1c control to encourage follow up visit compliance and medication adherence
V. Annual urine albumin-to-creatinine ratio and eGFR for all diagnosed with diabetes
VI. 7 Day Post Hospitalization Follow Up (address medication changes and/or post discharge needs)
VII. Encourage virtual visits as needed for further management

Type 2 Diabetes Mellitus Management

HYPERTENSION MANAGEMENT	**BP less than or equal to 130/80mmHg**	**Include ACE inhibitors or ARBs as first-line therapy for hypertension in patients with DM and CAD.**
WEIGHT MANAGEMENT	**Overweight classification: BMI ≥25 kg/m2**	**Recommended 5% weight loss to improve glycemic control May consider GLP-1r agonists (semaglutide, tirzepatide) for good weight loss efficacy when costs are not prohibitive**
SKIN EXAMINATION	**Screen skin and injection sites for complications**	
RETINOPATHY	**Annual Eye Exam**	• **Obtain reports from Ophthalmology/Optometry and scan into Epic** • **Risk factors for DM retinopathy complications with GLP1r or GLP/GIP use are having a pre-existing DR and when intensive treatment is initiated in patient with long-standing poor glycemic control**
NEPHROPATHY	**Monitor eGFR to include ACE or ARB therapy as well as GLP-1 or SGLT-2 inhibitors with documented CKD diagnosis. Refer to "HLN Diabetic CKD Clinical Standard" for treatment guidance Monitor proteinuria/microalbuminuria every 6-12 months**	
PERIPHERAL NEUROPATHY	**Yearly Foot Exam to identify risk factors for ulcers and amputations. PAD screening**	**Encourage proper footwear and preventive foot self-care education. Visual inspection, along with ".DMFOOT" for documentation Screening patients over 50 or who have had DM for over 10 years Check pedal pulses**
STATIN THERAPY (INCLUDING SUPD MEASURE COMPLIANCE)	**<u>Moderate-Intensity Statin Therapy</u>** • **40-75 years without ASCVD, use statin in addition to lifestyle modifications** ***See table below for statin chart***	**<u>High Intensity Statin Therapy</u>** • **Multiple ASCVD risk factors or 50-70 years** • **10-year ASCVD risk of 20% or higher** • **Secondary prevention:** ○ **≥ 50% LDL-C reduction** ***Reference HLN's "Statin Therapy Management" clinical standard**
***ANTIPLATELET THERAPY WITH DIABETES AND HISTORY OF ASCVD**	**Primary Prevention Strategy: Aspirin Therapy 81mg/day Allergy to Aspirin and ASCVD use clopidogrel 75mg/day Combination Therapy: Aspirin plus low-dose rivaroxaban may be considered for patients with stable CAD or PAD and low bleeding risk**	**Long term treatment-dual antiplatelet therapy can be considered for patients with prior coronary intervention, high ischemic risk, and low bleeding risks to minimize major adverse CV events.**
MASLD & MASH *FOMERLY KNOWN AS NAFLD & NASH*	**Utilize ".HLNFIB4" to automate the fib4 score into the note based on the most recent lab work**	**Fibrosis-4 Index Score: Fib-4 Score <1.3 Patient is considered low risk. Advise on lifestyle modifications. Consider repeating testing in 2-3 years. Fib-4 Score 1.3-2.67 Patient should be scheduled for Liver Stiffness Measurement using ultrasound liver Elastography Fib-4 Score >2.67 Patient should be referred to GI**
ENDOCRINOLOGY	**Referral may be recommended for HgbA1c ≥ 9%, for 6 mos. without signs of improvement/per provider preference**	
RECOMMENDED VACCINATIONS	**Influenza; COVID-19; Zoster (recombinant); Pneumococcal**	
MULTIDISCIPLINARY RESOURCES	**Diabetes Educator/Foot Specialist**	

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Pharmacologic Therapy for Type 2 Diabetes Mellitus

Patient Categories	Treatment Considerations
Initial therapy	Metformin, if not contraindicated and if tolerated, is the preferred initial treatment. It has beneficial effects on A1c, may reduce CV events, and is weight neutral. Yearly measurements of B12 should be considered with long term use.
Newly diagnosed and A1C ≥ 10% and/or blood glucose ≥ 300	May consider initiating insulin therapy with Metformin. May also utilize GLP1r agonists or tirzepatide, if costs are not prohibitive. Consider changing insulins to oral therapies once symptoms resolve based on patient preference.
Newly diagnosed and A1C ≥ 9%	Consider initiating dual oral therapy including Metformin
A1C ≥ 1.5% of target or not achieving glycemic goals	Metformin in combination with other high efficacy oral agents (GLP1r agonist, 2nd gen Sulfonylureas, TZDs) for therapy intensification. May consider GLP-1 R agonists injectables before insulin, if not contraindicated. Due to the lack of additive glycemic benefit and higher patient costs, avoid the combination of DPP-4i and GLP1r agonists
Established ASCVD or high risk	Metformin along with medication therapies to reduce major adverse cardiovascular events & mortality (SGLT-2 inhibitors with proven benefit include empagliflozin & canagliflozin or GLP-1 R agonists include liraglutide, semaglutide (inj), and dulaglutide).
Established HF or CKD	Metformin along with medication therapies to reduce the progression of HF or CKD such as SGLT-2 inhibitors (including empagliflozin, dapagliflozin and canagliflozin; if contraindicated, may utilize GLP-1 R agonists- liraglutide, semaglutide (inj), and dulaglutide). Avoid TZDs with HF.
Stage 3 or 4 CKD Plus uRAC ratio ≥ 30mg/g	Maximum RASA therapy and may consider Finerenone to improve CV outcomes and reduce the risk of CKD progression

Refer to the Epic Physician sidebar HLN Diabetes clinical points resource for more medication information.

Quality Performance Measures for Type 2 Diabetes Mellitus

Performance Measure	Outcome
% Of Patients with Dx of DM	2 or more visits within the year
Diabetes Poor Control (Adverse Measure)	% DM pts w HgbA1c > 9%
Diabetes Good Control	% DM pts w HgbA1c < 8%
Early CKD with DM Monitoring	A1c<8; Urine Protein, BP 130/80 (all 90% Targets)
Diabetic Eye Exam	DM pts 18-75 yrs. with retinal eye exam or negative retinal eye exam within the year prior to the measurement period
Urine Protein Screen	% Of pts screened for urine protein annually (at minimum)
Kidney Health Evaluation for Patients with Diabetes	% of members 18-85 type 1 & type 2 diabetes with eGFR and urine albumin-creatinine ratio (uACR) within the year
% DM pts with Statin use	Evidence of statin use

References

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ii. American Diabetes Association. 6. Glycemic targets: Standard of Medical Care in Diabetes-2019. Diabetes Care 2019;42(Suppl.1):
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iv. American Diabetes Association. 10-11. Cardiovascular Disease and Risk Management: Standards of Medical Care in Diabetes-2019. Diabetes Care2019; 41(Suppl. 1): S103-138
v. Semaglutide and Tirzepatide.UptodateLexidrugs. accessed 08.01.24
vi. Julia H. Joo, Neha Sharma, Jacqueline Shaia, Anna K. Wu, Mario Skugor, Rishi P. Singh, Aleksandra V. Rachitskaya. The Effect of Glucagon-Like Peptide-1 Receptor Agonists on Diabetic Retinopathy at a Tertiary Care Center,Ophthalmology Science, Volume 4, Issue 6, 2024, 100547,ISSN 2666-9145. https://doi.org/10.1016/j.xops.2024.100547.

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Appendix

I. Statin Intensity Table

Intensity	Medication	Dose
High ≥50% LDL lowering	* +Atorvastatin	40-80mg
	Amlodipine-atorvastatin	40-80 mg
	*Rosuvastatin	20-40mg
Moderate 30-49% LDL lowering	* +Atorvastatin	10-20 mg
	Amlodipine-atorvastatin	10-20 mg
	*Rosuvastatin	5-10 mg
	+Simvastatin	20-40 mg
	+Ezetimibe-simvastatin	20-40 mg
	* +Pravastatin	40-80 mg
	Lovastatin	40 mg
	Fluvastatin	40-80 mg
	Pitavastatin	1-4 mg

1.) Statin Therapy for Patients with Cardiovascular Disease, HEDIS 2022
2.) AACE 2017 Guidelines for the Management of Dyslipidemia and Prevention of Cardiovascular Disease, Endocr Pract.2017;23 (Suppl 2)
** - Primary Prevention & CV mortality data (pg 56)*
+ - Secondary Prevention & CV mortality data (pg 57)
Link: American Association of Clinical Endocrinologists and American College of Endocrinology Guidelines for Management of Dyslipidemia and Prevention of Cardiovascular Disease - Endocrine Practice

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MODIFICATION HISTORY

Type	Revised By	Revised Date	Approval Date *(If Applicable)*	Notes
Creation		8/1/2018		
Revision		3/29/2019		Medication algorithms removed. Further defined A1C testing as well controlled vs poor controlled; Add 'l info for diabetic "complication" screenings section added.
Approval			4/9/2019	Approved by QCCC with addition of Refer to "Epic" sidebar for meds & clinical points and HLN Leader committee names added in header.
Revision		2/11/2020	2/11/2020	Final approval by QCCC with changes from the Adult PCP Leader Comm. Added "if clinically indicated" to bullet point 7 along with "avoid TZDs with HF" under pharmacologic therapy. Added 2020 HLN measures: Annual urine albumin/protein screening. Outcome measures TBD.
Revision	Megan Rainey	11/30/2021	11/30/2021	Kidney Health addressed, DM Foot Exams addressed, and LDL & Cholesterol guidance updated; Approved by QCCC
Approval			12/3/2021	Approved by Adult PCP Leader Committee
Revision	Megan Rainey/Summer Tripode	6/25/2024	9/20/2024	Added up to date revisions with the 2024 ADA standards includes (use of CGM's, Pharmacological guidance w GLP-1s, SUPD measure info, DM Foot exam with .phrase, updated metric to reflect "Kidney Health Evaluation and yearly eGFR w uACR (urine albumin-to-creatinine ratio)
Addendum	Megan Rainey	11/4/2024	n/a	Added requested .phrases built to enhance Diabetes notes within Epic. Added .HLNDMINFO and updated fib 4 for .HLNFIB4

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