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Guideline for Frequency of MNT/DSME at Endocrine & Diabetes Care Center

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Current Guideline

- The Endocrine & Diabetes Care Center (EDCC) does not currently have any written guidelines for either physician referrals to RDNs/CDEs or for frequency/duration of Medical Nutrition Therapy (MNT) or Diabetes Self-Management Education (DSME).
- Only certain physicians appear to be consistent in providing referrals for their patients.
- EDCC has a high rate of "no-shows" for the RDN, CDEs and pharmacists, although this rate is lower for physician appointments.
- The monthly 3-part Diabetes Class Is usually not full and is sometimes cancelled due to lack of patient registration.

Medicare Coverage for MNT and DSME

> Medicare Part B allows 3 hours of MNT for diabetes and/or renal disease in the first referral year and 2 hours of MNT in each subsequent year

> Medicare may cover additional visits for MNT when there is a documented change in medical condition (requires a new physician referral)

> Medicare allows for 10 hours of DSME the first year of diagnosis and 2 hours of DSME in each subsequent year

> Separate physician referrals are required EACH year for MNT and for DSME

> MNT and DSME cannot occur on the same day for Medicare reimbursement

References

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Background Research

- There are four critical times when MNT/DSMES should be assessed, provided and/or adjusted (Briggs Early and Stanley, 2018):
  - at diagnosis
  - annually to assess education, nutrition and emotional needs of patients
  - when factors arise that could affect self-management
  - when transitions in care occur
- There is strong evidence to support the effectiveness of MNT interventions provided by RDNs for improving HbA1c, with decreases up to 2.0% in T2DM and up to 1.9% in T1DM at 3–6 months. Ongoing MNT support is helpful in maintaining these glycemic improvements (Franz et al., 2017).
- The Academy of Nutrition and Dietetics (AND) has shown that there is strong evidence (using research studies from 1990-2013) to support the following recommendations (Franz et al., 2017):
  - Health care team members should ensure that all adults with T1DM and T2DM are referred for MNT
  - Implement 3-6 MNT visits in the first 6 months and then determine whether additional MNT encounters are needed
  - Implement a minimum of 1 MNT follow-up each year
- According to national data, only about half of patients with diabetes actually receive any diabetes education (Ali et al., 2013).
- Some of the potential barriers to accessing RDN services for MNT/DSME include (Briggs Early and Stanley, 2018):
  - Variable health insurance benefits for MNT/DSME
  - Geographic accessibility
  - Lack of understanding of benefits and coverage among patients and health care providers (including RDNs)

Recent Research

First Author (Year)	Type of Study and Study Population	MNT/DSME Frequency and Duration	Main Results
Agee et al. (2018)	Propensity Score-Matched Cohort Low-Income Adults with Type 2 DM (MNT patients [n = 81] were compared to a matched group of Primary Care only patients [n = 143])	At least 4 one-on-one MNT visits with RD (1 visit about every 3 months)	At 1 year follow up MNT group: HbA1c: -0.8% (p <0.01) Systolic BP: -8.2 mmHg (p <0.01) Diastolic BP: -4.3 mmHg (p <0.05)
Bowen et al. (2016)	RCT 150 adults with Type 2 DM who had not had any formal diabetes or nutrition education in the past year received MNT	*Carbohydrate gram counting group: (3) 30-60 minute visits over 3 months with RD-CDE *Modified plate method group: (3) 30-60 minute visits over 3 months with RD-CDE *Control group received (3) 30-60 minute general health education visits with a health educator	Pre-specified subgroup analysis of patients at 6 months with a baseline HbA1c of 7-10%, HbA1c decreased from baseline in the carbohydrate counting [-0.86%, P=0.006] and plate method groups [-0.76%, P = 0.01] compared to CG.
Chrvala et al. (2016)	Systematic Review of RCTs 118 unique DSME interventions for adults with Type 2 DM (11,854 enrolled in intervention groups [IG] and 11,093 were enrolled in control groups [CG])	*Mean DSME contact time was 18.26 hours in 92 interventions *Median DSME duration was 6 months with a range of 1–36 months	*DSME time >10 hours associated with significant improvements in HbA1C in 86 (70.3%) interventions *86% of the interventions based on combination DSME (both individual and group education) achieved significant improvements in HbA1c (mean of 0.88% reduction) compared with CG
Marincic et al. (2019)	Retrospective Chart Review Random samples of 100 charts of adults with Type 2 DM at 4 different regional outpatient diabetes education centers	DSME: Mostly group classes (6-8 hours) with individual DSME at 2 of the 4 sites (0.5-1 hour) MNT: 0.5-1.5 hours individual appointments *Program length was either 6 months (3 centers) or 12 months (1 center) *RDNs provided the nutritional management components of DSME and MNT	*After receiving DSME and MNT, 62% of patients reached glycemic targets (HbA1c ≤ 7%), as compared with 32% at baseline (P<0.001). *Significant reductions were observed at end of program and at 1 year in weight, BMI, and HbA1c.

Conclusions

- Strong evidence showing that multiple MNT/DSME visits for individuals with diabetes improves glycemic parameters and other health outcomes supports the importance of increasing the number of patients who are referred to MNT/DSME and who actually attend the visits.
- This is particularly important during the patient's first year of diagnosis when they are eligible for 10 hours of DSME (for Medicare patients; number of hours varies based on type of health insurance).
- Annual follow ups can help maintain the glycemic improvements and other health improvements.

Recommendations

- Physician referral for all patients newly diagnosed with diabetes (for both MNT and DSME); encourage all patients to attend the 3-part Diabetes Class series
- Newly diagnosed patients schedule an MNT visit with RDN at least every other month for first 6 months
- Advertise the Diabetes Classes in waiting room and exam rooms
- Physicians remind patients at least 2 times per year (during office visits) to follow up annually with RDN CDE and/or with RN CDE
- Mail out postcards, send emails and/or have automated phone calls semi-annually to remind patients to schedule annual MNT/DSME follow-up appointments
- Streamline referral process so that patients can easily request referrals for annual MNT/DSME visits
- Consider hiring more staff (RDN, CDE) to ensure patients don't have major delays in obtaining appointments
- Ensure that each patient with diabetes fully understands their medical insurance benefits regarding MNT and DSME; compile a list of the MNT/DSME benefits for each type of insurance
- Consider implementing a "no-show" fee after a patient has missed multiple MNT or DSME appointments; set up a tracking system for "no-show" rates with consequences for reaching certain high rates

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