



# Vermont Department of Financial Regulation

**Analysis of Medical Nutrition Therapy (MNT) Utilization in  
Vermont**

**Submitted by:**

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## 1.0 Executive Summary

### 1.1 Introduction

The State of Vermont's Department of Financial Regulation (DFR) retained BerryDunn to perform an analysis of medical nutrition therapy (MNT) in Vermont, identify barriers to optimal utilization, and provide recommendations for overcoming those barriers. MNT refers to a broad range of evidence- and nutrition-based treatment services offered to patients with diet-related medical conditions. MNT is a service that is typically provided by a registered dietitian (RD).

Patients with common chronic health conditions (CHCs) are often the target populations for MNT. Heart disease, diabetes, cancer, and obesity are significant drivers of mortality—causing over half of the U.S. deaths in 2018.<sup>1</sup> CHCs reduce quality of life and increase healthcare costs in Vermont and nationwide. During the recent public health emergency, individuals with CHCs were 12 times more likely to die from complications of COVID-19.<sup>2</sup> The DFR regulates commercial health insurance in Vermont, but the work under this project is not limited to responsibilities and authority of the DFR. Consideration of barriers, options, and recommendations includes more than commercial insurance coverage.

Although only applicable to a portion of the commercially insured population, insurance products subject to the Affordable Care Act (ACA) Essential Health Benefits (EHBs) and the Vermont “benchmark plan” are expected to include coverage for nutritional counseling and MNT. In 2021, the DFR explored requiring coverage for medically tailored meals, but determined that additional research was necessary before making recommendations.

### 1.2 MNT Barriers

Barriers identified to optimally accessing MNT are covered in four categories:

- **Third-party payer policies for coverage vary.** Coverage of MNT by third-party payers, including Medicare, Medicaid, and commercial insurance, varies and creates confusion for providers and patients.
- **Referrals.** Appropriate referrals for MNT by healthcare providers are often not made, due to a limited understanding of MNT and insurance coverage for the services, time constraints with managing the treatment plan, and challenges with coordinating access. Members might be unaware that they can self-refer for MNT.
- **Inefficient use of RDs and other clinical nutritional providers.** Efficient use of these providers has not been obtained due to limited access to appointments, perception issues with treatment for diets and by nutritionists, insurance billing issues for RD services, and communication and coordination among providers, patients, and payers.
- **Social determinants of health (SDoH).** SDoH prevent some populations from effective use of MNT and favorable outcomes. Related SDoH include transportation difficulties, low health literacy, limited access to healthy food options, time constraints due to work schedules, inadequate social support systems, mental health conditions impacting

motivation and adherence, and concerns related to potential bias and discrimination by healthcare providers.

Addressing these multifaceted challenges could improve access to MNT services.

### 1.3 Recommendations to Improve Access

A range of policy options has been identified that can be considered by the DFR and Vermont policymakers. These recommendations aim to reduce barriers to MNT services in Vermont, ultimately improving health outcomes. While the cost and logistics of implementing new policies were factors when developing recommendations, a formal review and calculation of the costs was not performed and is outside the scope of our analysis.

**Barriers associated with coverage** of MNT services could be reduced with the following actions:

- Provide regulatory clarification of existing state and federal requirements for commercial coverage of MNT, including prohibitions on coverage limitations that could be considered discriminatory practices for patients with different health conditions.
- Clarify regulatory expectations for claims processing for MNT services, including determinations of medical necessity, adequacy, and telehealth. Options may include a DFR bulletin or administrative rule.

**Provider education** in key areas could reduce barriers to MNT services, and which the state could potentially address by:

- Providing clarification about the clinical application of MNT for referring providers: MNT educational efforts could include appropriate use of MNT, especially beyond treatment for those with diabetes. Efforts could consider the development of standardized practices, clinical paths, and anticipated outcomes, as well as a process for a communication loop with the primary care provider (PCP) and specialists involved in managing overall patient health.
- Providing clarification of insurance coverage: Payer education about insurance coverage for both referring providers and RDs, including claims submission and coding, reimbursement, requirements related to telehealth, benefit requirements, cost sharing, network adequacy, claim denial appeals processes and DFR consumer and provider complaint processes.

Due to challenges associated with developing provider education programs, we recommend prioritizing insurance coverage educational efforts. The DFR has unique and specialized knowledge and may be well positioned to play a role with these efforts. In addition to in-house expertise, the commercial carriers are more likely to be responsive to the DFR when DFR is coordinating education sessions among carriers, provider professional associations, clinicians, and legislators to the extent interest exists.

**Social Determinants of Health.** When implementing changes to reduce barriers to MNT, policies that consider patients' SDoH should be explored. Examples include state financial

support for individuals with limited resources, arranging access to nutrition and MNT services on a mobile basis, providing cultural competency training to practitioners, and engaging in efforts to improve health literacy.

## 2.0 MNT Introduction

### 2.1 Purpose of Report

The DFR retained BerryDunn to analyze MNT services in Vermont, identify barriers to optimal utilization, and provide different policy options to the DFR and Vermont policymakers for overcoming those barriers. The DFR regulates commercial health insurance in Vermont, but the work under this project is not limited to responsibilities and authority of the DFR. Consideration of barriers, options, and recommendations includes more than commercial insurance coverage.

### 2.2 Introduction

MNT is commonly defined as a “nutrition-based treatment provided by a registered dietitian nutritionist.” It includes “a nutrition diagnosis as well as therapeutic and counseling services to help manage diabetes.”<sup>5,6</sup> MNT refers to a broad range of evidence- and nutrition-based treatment services offered to patients with diet-related medical conditions, and MNT is a service that is typically provided by an RD.

Supplied by interested parties, the following served as BerryDunn’s guide of the optimal vision of MNT utilization within the Vermont healthcare system to help prevent and treat diet-related health conditions:

- Primary care providers (PCPs) and other frontline, non-specialist providers, such as urgent care and emergency care providers, have a consistent understanding of the indications for MNT, including how MNT fits within other treatment options, such as pharmaceuticals and Diabetes Self-Management Education and Support (DSMES) services or other self-management programs.
- PCPs and other frontline, non-specialist providers have a current and sufficient understanding of the health outcomes that can be expected from MNT and are comfortable both referring patients to MNT and, if they are a PCP, providing medical care that is integrated with MNT.
- Insurance coverage includes clinically indicated MNT and providers referring patients to MNT are aware of what MNT services are reimbursed by insurance.
- Patients do not forego clinically indicated MNT due to lack of timely appointment slots to see MNT providers, food access, transportation constraints, or other secondary barriers.
- Patients referred to clinically indicated MNT access such treatment and achieve expected health outcomes.

Our analysis relied heavily on the use of Vermont's all payer claims database (APCD) called the Vermont Health Care Uniform Reporting and Evaluation System (VHCURES), interviews with

healthcare professionals providing MNT, and information provided by commercial carriers in Vermont. Also considered were other available data in Vermont, the published literature, federal and State insurance laws, and the geography of the State.

BerryDunn would like to acknowledge that the Green Mountain Care Board (GMCB) as the steward of the VHCURES data. The analyses, conclusions, and any recommendations drawn from the data are solely those of BerryDunn, are not necessarily those of the GMCB or the DFR.

Patients with common CHCs are often the target populations for MNT. Heart disease, diabetes, cancer, and obesity are significant drivers of mortality—causing over half of the U.S. deaths in 2018.<sup>3</sup> CHCs reduce quality of life and increase healthcare costs in Vermont and nationwide. During the recent public health emergency, individuals with CHCs were 12 times more likely to die from complications of COVID-19.<sup>4</sup>

Some CHCs are preventable through healthy eating, physical exercise, and maintaining an appropriate weight.<sup>5</sup> Research has overwhelmingly found that healthy diets reduce the risk of major diet-related chronic diseases, such as diabetes, cardiovascular disease, and some cancers. Furthermore, over two-thirds of U.S. adults are overweight or obese, defined as a body mass index (BMI) of  $>30.0$  kg/m.<sup>2</sup> Obesity is considered a chronic disease itself, but the diagnosis is also a risk factor for some CHCs.<sup>6</sup>

MNT is considered a covered benefit under commercial coverage, Medicare, and Medicaid; however, barriers to using the coverage exist. Although BerryDunn considered only a sample of the patient experiences in Vermont, our analysis of the VHCURES identified 5,000 – 6,000 unique patients a year who receive MNT services and well over one-third of the population with CHCs who would likely highly benefit from MNT. Interested parties indicated that patients with diabetes, prediabetes, gestational diabetes, hypertension, and heart disease should be specifically identified, and we refer to those populations having had a “qualifying diagnosis.” While this study focused on the most common CHCs for which MNT is provided, there are many other diagnoses that would benefit from MNT.

## 3.0 MNT Barriers

Our analysis identified the following barriers to obtaining optimal utilization of MNT within the Vermont healthcare system. The most significant barriers relate to coverage, followed by the referring provider, the RD, and SDoH.

### 3.1 Coverage of MNT

- Medicare coverage includes limitations on MNT access. Examples include restrictions that require referrals to come from physicians, not nurse practitioners or physician assistants; the exclusion of MNT coverage on the same day as diabetes self-management training (DSMT); and bundling services when end-stage renal disease treatment is provided.<sup>7</sup>
- Commercial insurance coverage includes MNT, but insurers' utilization management practices for MNT coverage vary significantly between carriers.
- Differing State and federal regulatory requirements for coverage of MNT services results in inconsistent coverage between payers.
- Referring providers' and RDs' understanding of carrier policies pertaining to MNT is often less than ideal, discouraging the use of MNT.
- MNT could be classified as preventive or therapeutic, potentially resulting in different cost-sharing levels through deductibles, coinsurance, and copayments. Cost sharing at virtually any level could serve as a barrier to care. Current federal guidance permits changes to cost sharing without triggering defrayal under the Affordable Care Act, and there are no state regulations that specifically address MNT cost-sharing limits.
- Universal access to medical meals and prescriptions for food programs does not exist.
- Diet-related therapy for controlling Type 2 diabetes is more common than for other conditions, and current public policy that focuses on diabetes may result in the provision of DSMT services when MNT is more appropriate.

### 3.2 Referring Provider

- Referral patterns differ based on the perceived value of MNT services provided by an RD. Patterns can vary by referring provider level of clinical training and overall experience, and interviews suggest that more experienced providers may be more likely to make appropriate referrals for MNT. Some providers:
  - Do not fully understand the benefits associated with MNT services.
  - Do not understand MNT coverage by payer.
  - Believe they are already providing sufficient nutrition information.
- Time constraints and other limits with referring provider resources may hinder providers' ability to make referrals.

- Current knowledge about the availability and access to MNT services is highly variable.
- Communication systems may be insufficient for the referring provider to receive feedback from the RD on the course of treatment and outcomes.
- Without appropriate reimbursement for visits that combine primary care and MNT, MNT would represent an additional cost for primary care practices, discouraging what could be a more efficient delivery model.
- Some provider specialties may be less likely to make an MNT referral.

### 3.3 Registered Dietitians

- RD staffing and availability of appointments are constrained in some cases. Adequate clinical space for RDs to provide MNT may be an issue, potentially reflecting larger healthcare organizational priorities for higher margin clinical service lines. With examples of more than four months for the next appointment, it is unclear why some organizations are not hiring more RDs.
- The existing Federally Qualified Health Center (FQHC) staffing model for availability of RDs to perform MNT is not meeting the current demand for MNT services.
- Balance of clinical experience and availability of RDs in the workforce to perform MNT may not be sufficient. Feedback suggests that new graduates are often the most frequent applicants for openings.
- Perception issues exist among patients about obtaining services that relate to diet and healthcare treatment. Many people discount the value of services that are termed diet counseling.
- Electronic health record (EHR) limitations: The absence of standardized, consistent documentation in EHRs poses a challenge to successful treatment. Inconsistent documentation practices also make it difficult to track and assess the impact of MNT on patient health outcomes. Without adequate data, efforts to improve the clinical delivery process and demonstrate favorable outcomes are more challenging.
- Lack of effective communication channels between the different providers undermines effective referrals and follow-up care.
- Although some providers offer in-home and virtual MNT, some providers require in-person visits which might pose geographic and travel barriers.
- Many RDs do not have a National Provider Identifier (NPI), which is required for billing payers for MNT directly. This may serve as a barrier to receiving reimbursement; impact the overall funding of MNT services at the organizational level; and impact the ability to demonstrate positive MNT financial margins. If MNT is just considered a cost center, the services are less likely to be expanded.



### 3.4 Social Determinants of Health

- Individuals may lack financial resources to access MNT services.
- Transportation to healthcare facilities to receive in-person MNT services may be difficult for some individuals, particularly those outside of the greater Burlington area.
- MNT services might lack cultural sensitivity and not be delivered in individuals' preferred language.
- Individuals with lower health literacy and nutrition knowledge may be less likely to understand and adhere to dietary recommendations.
- Individuals with nontraditional working hours may have less time to attend MNT sessions, and longer working hours may preclude individuals from having time to prepare meals.
- A lack of family or community support could render it difficult for individuals to adhere to new dietary changes.
- Some individuals are not food insecure, but they lack the budget and time to regularly include fresh, perishable fruits and vegetables in their diet.
- Mental health status, such as having depression, anxiety, and/or other mental health conditions, can impact motivation and adherence to MNT.
- Potential bias and discrimination by healthcare providers can lead to distrust and a reluctance to engage in MNT.

### 3.5 Food Insecurity

- Some areas, often called “food deserts,” do not have a grocery store nearby, impacting access to affordable and nutritious foods. Rural areas have fewer grocery stores, and individuals need to drive farther to obtain healthy food to satisfy MNT treatment plans (See Figure 2). Individuals living in food deserts have limited access to affordable, nutritious food. This can prevent them from following prescribed diets or making healthy food choices.<sup>8</sup>
- Individuals may live in areas with limited kitchen facilities or inadequate storage for perishable foods, which can hinder dietary adherence.
- Financial constraints may prevent people from purchasing food for specialized diets and nutritional supplements.
- Although RDs did not specifically state food insecurity as a major barrier, the interviews revealed related issues that create barriers to optimal use of MNT and limit the ability for providers to follow their patients' progress. Public and private efforts to assist patients with food sources, gas cards, and groceries were acknowledged by RDs as helpful initiatives.

## 4.0 Policy Options for Overcoming Barriers to MNT Utilization

Recommendations for overcoming barriers to MNT use are included below and followed by additional policy options that Vermont may wish to consider. While the cost and logistics of implementing new policies were factors in developing this list of recommendations, a formal review and cost calculation were not performed and are outside the scope of our analysis.

### 4.1 Education

Based on interview feedback about variation in referral practices and a review of differences in commercial insurance coverage administration, a concerted effort to improve understanding of MNT and insurance would help overcome barriers associated with MNT use.

**Clinical Application of MNT.** Develop MNT educational efforts for potential referring providers on appropriate use of MNT, especially beyond treatment for diabetics. These efforts may be particularly successful if targeted at specialties that treat patients more likely to benefit from MNT but currently have low referral rates. Clinical educational efforts focused on referrals should consider the development of standardized practices, clinical paths, and anticipated outcomes, as well as a process for a communication loop with the primary care provider (PCP) and specialists involved in managing the patient's care. The training could address the distinction between what the referring provider is best positioned to address and the responsibilities that should be managed by the RD as a therapist. Focusing on MNT as a form of clinical therapy instead of diet management may also enhance patient and provider responsiveness to concerns with traditional diet counseling.

**Insurance Coverage.** Educational efforts for referring providers and RDs regarding MNT insurance coverage could include training on the following:

- Claims submission and coding
- Reimbursement
- Prior authorization
- Benefit designs, including limits on the number of visit and use of cost sharing
- Network adequacy
- Claim denial appeals processes
- DFR consumer and provider complaint processes

Specific training about virtual care and audio-only services may especially benefit RDs due to the high percentage of MNT services provided virtually, but very few claims reflected for audio-only services.

Similar education efforts related to coverage could be offered for Medicare and Medicaid.

**Educational Considerations.** A challenge with providing effective education is identifying the expertise and resources available to perform the training and coordinating with interested

parties. Outreach is suggested to existing state agencies and healthcare provider professional organizations to explore the most appropriate opportunities for providing educational opportunities about the benefits of MNT and using healthcare resources efficiently. The educational plan should also consider existing RD staff resources for those providing MNT so that higher patient and referring provider expectations can be met without exceeding provider capacity.

Vermont could prioritize educational efforts related to insurance coverage and recognize the advantage of the knowledge and skills at the DFR. The DFR could potentially assist with coordinating education sessions among carriers, provider professional associations, clinicians, and legislators to the extent interest exists. Carrier-specific education could target both in-network and other interested healthcare providers. Additionally, through this project work and the use of the VHCURES to analyze MNT use, the DFR has demonstrated its role as an interested party in the use of commercial claims data to study MNT in Vermont.

Additional considerations for education efforts:

- Diabetes is frequently coded as the principal reason for the visit when MNT is provided, but many patients receiving MNT have a history of other conditions appropriate for MNT.
- Eating disorders and obesity are the top conditions for patients without a qualifying diagnosis.
- Individuals with inflammatory bowel disease (IBD) can benefit from MNT, and integration of MNT services with IBD clinics could help with symptom management and disease progression.
- According to the VHCURES, use of MNT is more common among younger age groups, particularly females, despite the increased prevalence of qualifying diagnoses that typically become more common with age. Interview findings suggest age frequency use patterns that differ from what the claims data analysis identified. Some of the RDs interviewed seem to feel MNT for older groups was more commonly utilized than for younger age groups.

## 4.2 Coverage – Medicare and Commercial Insurance

### Medicare

Medicare is a federal benefit for those with specific disabilities or at least 65 years old. Because federal regulations govern this program, state policymakers cannot directly modify the scope of covered services or make programmatic changes. Medicare Advantage products are also largely outside of state insurance regulation, and Medicare supplemental products essentially mirror federally determined benefits. However, Vermont has successfully pursued waivers that benefit Medicare patients by allowing for increased provider collaboration, MNT coverage, and reduced patient costs for MNT services. The alternative arrangements have been well received by patients and providers, leading to improved use of MNT services within the Medicare population.

Even after considering the waiver, our VHCURES analysis showed surprisingly low MNT claim levels of MNT statewide within this population. The observations are particularly striking considering the high numbers of older Medicare patients with conditions who would benefit from MNT services. Similar Medicare waiver efforts that allow for increased funding of MNT services without patient cost sharing could be pursued to offer alternative coverage and reimbursement for MNT services, and help to overcome barriers associated with Medicare coverage, referral, and reimbursement policies.

#### Commercial Insurance

While MNT coverage is provided by VT commercial carriers, there are inconsistencies in carriers' benefit administration, and providers face challenges with navigating different carrier policies. While employer self-insured health benefit policies are outside of state-based insurance regulation, carriers and third-party administrators typically maintain the same provider networks and administer benefits in a similar manner as their fully insured and state-regulated products. Several actions are recommended to help improve MNT benefit administration and overcome barriers to MNT use.

*Regulatory Clarification.* As a first step, the DFR could provide additional regulatory clarification about current MNT expectations for any health condition that could meet the standards of medical necessity for MNT and specify that MNT is part of nutritional counseling. The guidance could also clarify coverage expectations for virtual MNT. MNT is referenced in statute and the essential health benefits (EHBs)<sup>9</sup> benchmark plan in relation to diabetes, and generally coverage could be expected under nutritional or diet counseling. Stakeholders view federal guidance for required MNT coverage as too vague, stated in a January 2023 letter from the Association of Diabetes Care and Education Specialists, "many state health plans continue to provide ambiguous and inconsistent coverage for both MNT and nutrition services."<sup>10</sup> Both federal and State laws prohibit discriminatory practices of limiting the benefit design to services that will be covered for patients with one health condition but not another condition, and this could be clarified further. Additional guidance about the current expectation for coverage of MNT services may prove helpful to carriers and providers administering MNT services.

*Regulatory guidance for claims processing.* DFR could provide guidance on billing and claims processing expectations for services. Examples include guidance on the specific codes eligible for reimbursement, place of service, and restrictions on requirements for additional documentation. The DFR's February 2020 bulletin (No. 207) on colorectal cancer screening could serve as an example.<sup>i</sup>

*Communicating MNT Self-Referral Opportunities.* Carriers could be encouraged by the DFR to communicate to members if they may self-refer for MNT services, and the DFR could coordinate communication by issuing a public service announcement. If members believe they need a referral in order to access MNT services, this reflects a barrier to access. If carriers are reluctant to voluntarily commit to maintaining this option for members, empowering members with the knowledge that they may self-refer may create a path forward for MNT when other providers

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<sup>i</sup> <https://dfr.vermont.gov/sites/finreg/files/regbul/dfr-bulletin-insurance-207-crc-screening.pdf>

involved in their treatment may not understand the value of MNT. Considering the range and frequency of conditions that could appropriately lead to MNT, members would be well positioned to meet medically necessary criteria and carriers would be less likely to impose overly restrictive prior authorization requirements.

### 4.3 Transparency

Public disclosure of carrier practices often brings attention to deficient participants, resulting in a correction without additional regulatory action. Vermont could recommend public reporting on the commercial carrier administration of MNT benefits, either through carrier-submitted data to the DFR or a report produced using the VHCURES. Either approach would require DFR resources to compile and produce information for the public and policymakers, and it would need to be sufficiently detailed to achieve the intended effect. The report could include covered MNT services by Common Procedural Terminology (CPT<sup>®</sup>)/Healthcare Common Procedure Coding System (HCPCS) codes, the amounts paid to providers, geographic breakdowns, paid and denied frequencies, and reasons for denials. However, the resources required for developing the data collection tool and for compiling information for the report should not be underestimated. Using VHCURES data would allow the DFR or another entity to produce most of the information needed for public transparency. Unfortunately, denied claims are not currently included in the VHCURES, and this potentially insightful information would be missing from the report without a separate submission requirement. Enhancing the VHCURES database to include denials could provide advantages for Vermont on several fronts, but the timeline for making a data collection change would need to consider the steps associated with data collection rules, submission mechanisms, and historical data analysis time frames.

### 4.4 Social Determinants of Health

When implementing changes to reduce barriers to MNT, Vermont could encourage policies that consider patients' SDOH, and would recommend that the state pursue policies that consider patients' SDOH such as:

1. Options to create subsidies or direct patient financial aid to make MNT services more affordable for individuals with limited financial resources, including those without Medicare, Medicaid, or commercial insurance coverage. Examples include sliding-scale fees, grants, or other direct assistance programs.
2. Use of mobile clinics offering MNT services that may be able to reach individuals uncomfortable or unable to use virtual treatment offerings and who do not have reliable transportation.
3. Cultural competency training to MNT practitioners to help ensure they can effectively communicate and tailor dietary recommendations to individuals from diverse cultural backgrounds. Consider utilizing multilingual practitioners or interpreters.
4. Educational programs to improve health literacy and nutrition knowledge among the target population. Use plain language materials and visual aids to enhance understanding.

5. Linking of populations receiving food benefits to MNT education/services.
6. Vermont could perform a cost-benefit analysis of providing certain types of food programs, such as medically tailored meals, which have been shown to reduce blood pressure in following hospitalization for patients with congestive heart failure.<sup>11</sup>
7. Offering flexible scheduling options, including evenings and weekends, to accommodate individuals who have irregular or long working hours.
8. Establishing support groups or community programs in which individuals can share experiences, tips, and motivation to help adhere to dietary changes.
9. Encourage family involvement in MNT services to foster a stronger support system.
10. Recognizing and addressing the interaction and overlap between mental health and nutrition and collaborating with mental health professionals to provide holistic care, particularly for individuals who have conditions such as depression or anxiety.
11. Developing mobile applications and/or online platforms that provide dietary guidance, track progress, and offer reminders for meal planning and preparation.
12. Creating feedback mechanisms in which individuals can provide feedback to providers and healthcare institutions about their MNT experience and use the resulting feedback to improve services and remove barriers.
13. MNT can be considered a nutrition support under 1115 waiver demonstrations, which can cover broader health-related social needs (HRSNs). The Centers for Medicare & Medicaid Services (CMS) granted approval to Arkansas (AR), Massachusetts (MA), and Oregon (OR), allowing Medicaid and Children's Health Insurance Program (CHIP) members to utilize their benefits for food and nutrition services. An option could be for Vermont to modify its demonstration to expand the language on food and nutrition services.<sup>12,13</sup>
14. Consider offering health coaching services to reinforce MNT services, particularly for patients who may have lower adherence. However, these services may be difficult for some individuals to access, particularly those who lack reliable, accessible transportation.
15. Build on existing efforts to improve social environments and public health system efficiencies by including MNT in state-level initiatives that encourage MNT referral and treatment options.

## 5.0 Additional Considerations

In addition to the policies options identified above, the following actions described below could lead to fewer barriers and more robust use of MNT services in Vermont. Because healthcare policy is constantly evolving, these actions may warrant further consideration in the future.

1. Change terminology within the state for “dietitian” to some form of “therapist.” According to feedback received during interviews, perceptions regarding dietitians and diet counseling can be negative and lead to an inaccurate understanding of what MNT can offer.
2. Explore options for school-based care with MNT. Eating disorders and obesity are the top conditions for patients without diabetes (Type 1 and 2).
3. Provide incentives for RDs to offer MNT in geographic areas with high rates of food insecurity, such as enhanced Medicaid payment levels.
4. Explore modifying licensing, certification, or other regulatory requirements for providing diet services, including MNT to allow more providers, including physician extenders, to offer MNT. Modified regulatory standards for providers may increase delivery system capacity, but any changes should consider whether payers are likely to include the new MNT providers in their networks and offer adequate reimbursement for services provided. Carriers would still retain the ability to choose providers for in-network participation based on their own selective standards.

## 6.0 Literature Review

The following includes observations from the literature review.

MNT is a treatment provided to individuals with CHCs or at risk for developing CHCs. MNT is “nutrition-based” treatment provided by an RD and:

- Is an intensive, focused, and comprehensive nutrition therapy service.
- Involves in-depth individualized nutrition assessment.
- Relies heavily on follow-up to aid with behavior change.
- Establishes goals, a care plan, and interventions.
- Includes plans for follow-up over multiple visits to assist with behavioral and lifestyle changes relative to each person’s nutrition problems and medical condition or disease(s).<sup>14</sup>

The goals of MNT include:<sup>15</sup>

- Encourage and endorse healthy eating patterns, with a focus on a diverse range of nutrient-rich foods in appropriate portions, to enhance overall well-being and specifically to:



- Enhance A1C, blood pressure, and cholesterol levels (individual goals may vary based on factors like age, diabetes duration, health history, and current health conditions).
- Attain and sustain target body weight objectives.
- Delay or help prevent diabetes-related complications.
- Address unique nutritional requirements, considering individual and cultural preferences, health literacy, numeracy, access to wholesome food options, willingness, and capacity for behavioral modifications, as well as barriers to change.
- Preserve the joy of eating by promoting positive messages about food choices, only limiting choices when supported by scientific evidence.
- Equip individuals with diabetes with practical tools for everyday meal planning.<sup>16</sup>

More than 37 million people have diabetes in the U.S., and another 96 million adults have prediabetes. According to information provided by the Centers for Disease Control and Prevention (CDC), diabetes is one of the most expensive chronic conditions in the U.S., accounting for about one out of every four healthcare dollars spent in the country. Among the medical expenses incurred by individuals with diabetes, approximately 48% to 64% are attributed to complications such as heart disease and stroke. Interventions such as diabetes self-management education and support services are proven effective in reducing the risk of complications, which significantly decreases the cost burden of the disease.<sup>17</sup> MNT can also help address obesity, which is associated with nearly \$173 billion in healthcare expenditures annually and impacts 20% of children and 42% of adults in the U.S. Individuals who are obese are at an increased risk for developing other CHCs such as Type 2 diabetes and heart disease, which are both associated with high healthcare costs.<sup>18</sup>

#### *MNT Efficacy Studies*

MNT, when provided by RDs, has shown to be effective in reducing HbA1c levels for individuals with both Type 1 and 2 diabetes.<sup>ii,19,20</sup> The impact extends beyond glycemic control, with positive effects on weight reduction and overall health. Although MNT offers significant health improvements when offered as a standalone service, when combined with DSMT, it is even more effective.<sup>21</sup>

Based on the results of its 2017 meta-analysis, the Academy of Nutrition and Dietetics Nutrition Practice Guidelines for MNT recommend:

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<sup>ii</sup> HbA1C is a common test used to diagnose and monitor control of diabetes. The HbA1C test reflects an individual's blood sugar over the past two to three months. Reducing blood sugar levels for individuals who have diabetes, regardless of whether they have Type 1 or Type 2 diabetes, is an important part of disease management. Lowering HbA1c levels is a positive outcome as it indicates better long-term blood sugar control and overall diabetes management.



- Registered dietitian nutritionists have three to six encounters with patients during the first six months. After first six months, evaluate whether additional encounters are required.
- One annual MNT follow-up at a minimum after the six months has been completed.<sup>22</sup>

Research shows a connection between RD-administered MNT and reductions in HbA1c levels in individuals with both Type 1 (0.3% – 1%) and 2 (0.5% – 2%) diabetes.<sup>23</sup> The 2019 American Diabetes Association’s *Nutrition Therapy for Adults With Diabetes or Prediabetes: A Consensus Report* recommends that adults living with Type 1 or 2 diabetes be referred for individualized, diabetes-focused MNT upon diagnosis. The reports states MNT is recommended throughout the lifespan of those with this condition, particularly when trying to achieve treatment goals. MNT should be provided in alignment with the overall disease management strategy for each individual, which might also include medications and physical activity.<sup>24</sup>

The report notes MNT can be more efficacious than medications to maintain glycemic control in Type 2 diabetes, as evidenced by HbA1c reduction.<sup>25</sup> For those who are pre-diabetic, MNT can prevent or delay the progression to Type 2 diabetes, underscoring the effectiveness of MNT as a therapeutic approach. MNT interventions delivered by RDs were associated with a HbA1C reduction of up 2.0% among those with Type 2 diabetes and up to 1.9% among those with Type 1 at three to six months into the intervention.<sup>26</sup> Maintaining an HbA1C <7% over a five-year period has been found to significantly reduce the odds of developing diabetes-related complications.<sup>27</sup>

A 2017 examination of data from a number of independent studies of the same subject, found that individuals with Type 2 diabetes who received nutrition education experienced an average weight reduction of 4.6 pounds (2.07 kg) at 12 months. With ongoing MNT services, these decreased levels were maintained for 12 months and, in one trial, 6.5 years—the length of the study.<sup>28</sup>

MNT demonstrated a positive influence on medication use and quality of life for people with cardiovascular disease and diabetes. Six studies demonstrated quality of life improvements for individuals with these conditions, including the following:

- Self-perception of health status
- Knowledge and motivation
- Treatment satisfaction
- Psychological well-being<sup>29</sup>

DSMT is a distinct service that utilizes different techniques than MNT. When DSMT and MNT are combined, research indicates they are more effective than when offered individually.<sup>30</sup>

## 7.0 VHCURES Data Analysis

BerryDunn used the VHCURES data to analyze MNT service use in Vermont and to identify patterns associated with patient population characteristics. Findings from these analyses were

considered in identifying options and developing recommendations for improving utilization of MNT services.

In some cases, the findings from the VHCURES data are paired with information available publicly on Vermont's geography, access to grocery stores, and other related information. BerryDunn created visual displays of these data and they will be available on the DFR website at a later time. The visualizations are interactive and display information in a manner that is not viable in this static report.

The VHCURES includes an extensive, anonymous set of claims data described by the Vermont Green Mountain Care Board website as "medical and pharmacy claims and demographic information for 60 percent of commercially insured Vermonters and 100 percent of Medicaid and Medicare enrollees"<sup>31</sup> allowing BerryDunn and the DFR to analyze utilization of MNT services and patient conditions based on the diagnoses submitted on claims for payment.

DSMT services were considered during the analysis because of the possible replacement of MNT with DSMT, especially if coverage or referral requirements were relevant. For example, Medicare does not provide coverage for MNT when provided on the same day as DSMT, and an MD must make the referral for MNT. Medicare allows physician assistants and nurse practitioners to refer for DSMT.

#### *Most Frequent MNT Services*

MNT and DSMT services were identified by the CPT<sup>®</sup> and HCPCS assigned codes. The most common billed services and percentages include:<sup>iii</sup>

- CPT<sup>®</sup> 97802 initial assessment and intervention with patient for MNT – **20%** of services
- CPT<sup>®</sup> 97803 reassessment and intervention with patient for MNT – **73%** of services
- CPT<sup>®</sup> 97804 group MNT – **1%** of services
- HCPCS G0108 individual diabetes outpatient self-management training – **7%** of services

There was a small sample of claims submitted with the following HCPCS codes (only a fraction of 1% of total visits for MNT or DSMT):

- HCPCS G0109 group diabetes outpatient self-management training
- HCPCS G0270 MNT reassessment and subsequent intervention following second referral
- HCPCS G0271 MNT reassessment and subsequent intervention following second referral with change in diagnosis

Patient diagnoses are included on claims submitted, using the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM). For purposes of analysis,

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<sup>iii</sup> Percentages will exceed 100% due to rounding.

BerryDunn categorized the diagnoses into categories developed by the Agency for Healthcare Quality and Research, through the Clinical Classification Software Refined (CCSR).<sup>32</sup>

The cost of treatment to the patient and access to RDs performing MNT are some of the more obvious potential barriers to utilization of MNT services. The allowed amount paid for healthcare services is the total amount that will be paid to an RD for an MNT or DSMT service when the payer (e.g. Medicare or commercial insurance) and patient liabilities are all added together. The allowed amount is based on the fee schedule used by the payer. The patient liability derives from the deductible, copayments, or coinsurance. When examining the services billed in 2022, the following observations were noted for the most common services billed:

CPT® 97802 initial assessment and intervention with patient for MNT – 20% of services

- 13% of allowed amounts were paid by patient
- 52% of visits were virtual

CPT® 97803 reassessment and intervention with patient for MNT – 73% of services

- 8% of allowed amounts paid by patient
- 64% of visits virtual

CPT® 97804 group MNT – 1% of services

- 32% of allowed paid by patient
- 86% of visits virtual

HCPCS G0108 individual diabetes outpatient self-management training – 7% of services

- 15% of allowed paid by patient
- 9% of visits virtual

Most of the MNT visits are virtual, even for the initial visit. This suggests that with high levels of virtual care available, traveling to RDs for MNT services is largely unnecessary, and barriers associated with traveling to appointments are less likely to be a major barrier to patients receiving virtual treatment if they have access to a computer or a phone.

The percentage of the allowed amount paid for by the patient does not appear excessive for preventive services that do not meet federal requirements for first dollar coverage, and the overall cost of MNT services is less than the cost of many other healthcare treatments. A greater share of the allowed amount is paid by the patient for group MNT. Payer fee schedules are often based on the resource based relative value scale (RBRVS) system used by CMS, and the relative value is much less for group therapy than for individual treatment. The presumed lower allowed amounts may contribute to the reason that patients pay a larger share of the cost, but the requirement for any cost sharing will be a barrier to care and should be considered regarding increasing utilization levels.

Given the observed low utilization rates for MNT among individuals aged 65 and older in BerryDunn’s claims analysis, it could be beneficial to direct focus toward education and outreach efforts. By prioritizing comprehensive educational initiatives, this demographic could be empowered with the knowledge and resources needed to make informed health decisions, potentially resulting in improved health outcomes and increased utilization of available services. With the higher likelihood of qualifying diagnoses among individuals in this age group, interventions could have an outsized impact in overall population health.

*Payer-Specific Data*

The VHCURES allow data to be stratified by Medicare, Medicaid, and commercial payer. Table 1 shows the percentage of MNT and DSMT visits. There is substantial variation among payers when compared across MNT visits, DSMT visits, and the percentage of members with a qualifying diagnosis. The variation is high even within the commercial insurance carriers.

These percentages could differ based on several factors—such as the prevalence of health conditions that MNT is appropriate for, the geographic distribution of membership, and access to MNT services by in-network providers—but the amount of variation observed suggests that payer-specific benefits and reimbursement policies are affecting MNT and DSMT service use.

**Table 1: MNT by Payer**

| <b>Payer Name</b>  | <b>Payer Percent of Total MNT Visits</b> | <b>Payer Percent of Total DSMT Visits</b> | <b>Payer Percent of Total MNT and DSMT Visits</b> | <b>Percent of Members With Qualifying Diagnosis</b> |
|--|--|---|---|---|
| Aetna  | 0%                                       | 1%  | 0%  | 1%  |
| BCBS Other   | 1%                                       | 0%  | 1%  | 1%  |
| BCBSVT   | 47%                                      | 12%                                       | 44%   | 19%   |
| Cigna  | 2%                                       | 1%  | 2%  | 2%  |
| HPHC   | 0%                                       | 0%  | 0%  | 1%  |
| MVP  | 7%                                       | 9%  | 7%  | 8%  |
| Medicaid   | 37%                                      | 34%                                       | 37%   | 19%   |
| Medicare   | 6%                                       | 35%                                       | 8%  | 44%   |
| Other  | 0%                                       | 0%  | 0%  | 0%  |
| United   | 1%                                       | 9%  | 1%  | 10%   |
| <b>Total</b>   | 100%                                     | 100%                                      | 100%  | 100%  |
| <b>Total Visits</b>                                      | 20,798                                   | 1,504                                     | 22,302  |   |
| <b>Total Members with Qualifying Diagnosis = 158,280</b> |  |   |   |   |

Due to the substantial interest in improving access to MNT for populations with diabetes, gestational diabetes, heart disease, hypertension, and prediabetes, these populations were considered separately and referred to as having a “qualifying diagnosis.” Patients are likely to have more than one of these conditions, but a hierarchy that would prioritize MNT for one diagnosis over another was not applied. MNT is appropriate for patients with a wide range of health issues, and in 2022, the VHCURES data show that 41% of the 6,367 distinct patients who received MNT services patients did not have one of the qualifying diagnoses. Of the MNT visits, 57% were for patients without a qualifying diagnosis during the 24-month window searched.

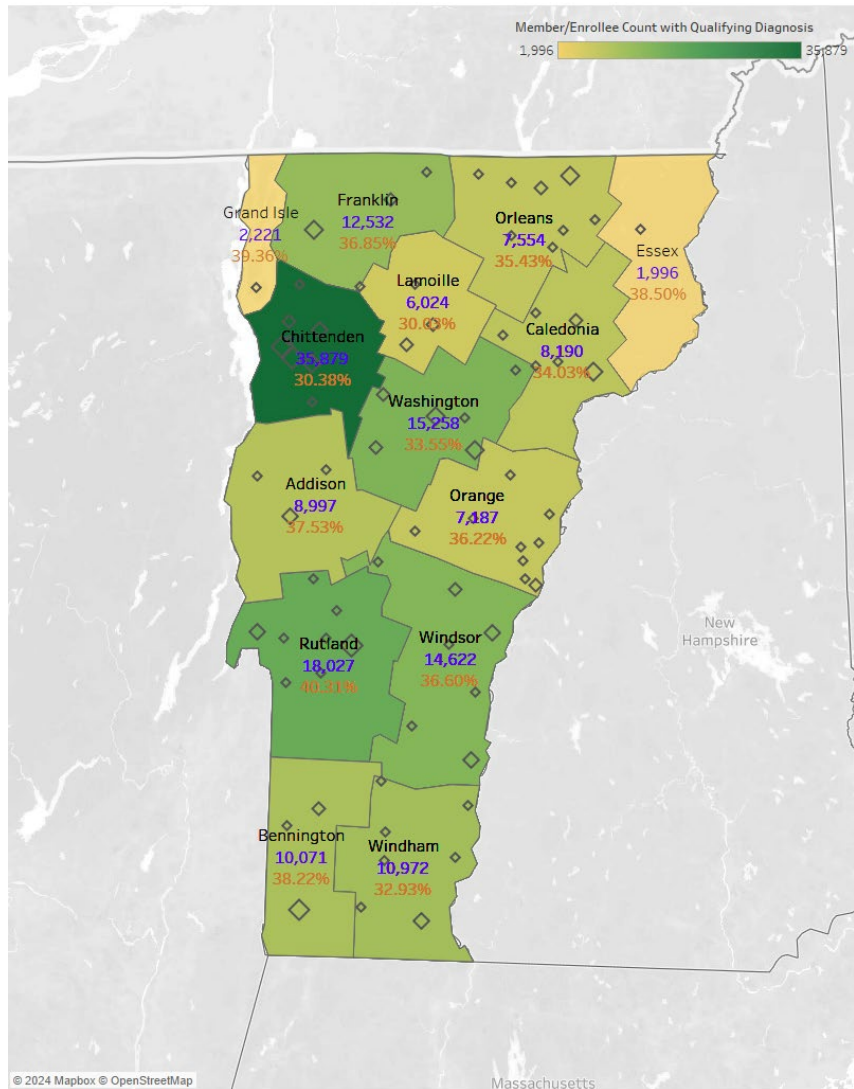
During calendar year (CY) 2022, approximately 30% to 40% of members covered by Medicare, Medicaid, and commercial insurance have one of the qualifying diagnoses. While the percentage varies based on county of enrollment (see Figure 1), the statewide average indicates that at least one-third of the population in the analysis has at least one qualifying diagnosis and may benefit from MNT.

**Figure 1: Members with a Qualifying Diagnosis by County**

2022 Member/Enrollee County with Grocery Store by Zip Code

Member/Enrollee Count with Qualifying Diagnosis

Percentage of Membership with Qualifying Diagnoses by County  
(VHCURES Membership)



BerryDunn reviewed MNT and DSMT claims for services with dates of service during CY 2022. Members were identified with a qualifying diagnosis using claims with a date of service between January 1, 2021, and December 31, 2022. Except for a three-month lookback for gestational

diabetes, the lookback period was up to 24 months. Diagnosis categories are not mutually exclusive, and members may be counted in multiple diagnosis groups.

The majority of patients with a qualifying diagnosis have hypertension, and in all cases, it is a relatively small share of the patients with a qualifying diagnosis that received MNT or DSMT services.

Data from all payers, including public and private, is included in the following tables.

**Table 2: Members with Diagnoses, MNT, and DSMT Services**

| Diagnosis            | Member Count With Qualifying Diagnosis | Member Count With Initial MNT | Member Count With MNT | Member Count With DSMT | Member Count With MNT or DSMT |
|----------------------|--|-------------------------------|-----------------------|------------------------|-------------------------------|
| Diabetes             | 41,824                                 | 758                           | 1,234                 | 842                    | 1,973                         |
| Gestational Diabetes | 776                                    | 64                            | 79                    | 53                     | 131                           |
| Heart Disease        | 84,695                                 | 1,074                         | 1,677                 | 441                    | 2,073                         |
| Hypertension         | 109,467                                | 1,004                         | 1,557                 | 548                    | 2,057                         |
| Prediabetes          | 15,383                                 | 239                           | 366                   | 20                     | 386                           |

The data show members who received follow-up MNT services without a record of an initial MNT service. Feedback from the interviews indicated that some patients receive an initial MNT service during their primary care visit and the provider does not bill for the MNT service. This may offer one explanation for the difference between total member counts.

Table 3 lists the visit counts for the most frequent primary diagnoses when patients received MNT but did not have a diagnosis in one of the qualifying categories. While there is a range of diagnoses, eating disorders are clearly toward the top of the list, and efforts to encourage MNT for these patients more generally may be highly beneficial.

The primary diagnosis is typically the principal reason for the visit, and the logic and standard definitions are based on the ICD-10 coding system.

**Table 3: Most Frequent Non-Qualifying Diagnosis on MNT Claims**

| ICD-10 Diagnosis Description        | Visit Count |
|-------------------------------------|-------------|
| Dietary Counseling and Surveillance | 6,820       |
| Eating Disorder Unspecified         | 1,106       |
| Other Specified Eating Disorder     | 558         |
| Anorexia Nervosa Restricting Type   | 440         |
| Obesity Unspecified                 | 346         |

| <b>ICD-10 Diagnosis Description</b>                | <b>Visit Count</b> |
|--|--------------------|
| Binge Eating Disorder                              | 215                |
| Morbid Severe Obesity Due to Excess Calories       | 163                |
| Avoidant/Restrictive Food Intake Disorder          | 162                |
| Overweight   | 154                |
| Bulimia Nervosa                                    | 126                |
| Abnormal Weight Gain                               | 74                 |
| Anorexia Nervosa Binge Eating/Purging Type         | 72                 |
| Abnormal Weight Loss                               | 65                 |
| Generalized Anxiety Disorder                       | 49                 |
| Anorexia Nervosa Unspecified                       | 47                 |
| Failure to Thrive Child                            | 43                 |
| Underweight  | 41                 |
| Gastro-Esoph. Reflux Disease Without Esophagitis   | 41                 |
| Hyperlipidemia Unspecified                         | 40                 |
| Feeding Difficulties, Unspecified                  | 32                 |
| Other Obesity                                      | 28                 |
| Constipation Unspecified                           | 25                 |
| Irritable Bowel Syndrome with Diarrhea             | 23                 |
| Celiac Disease                                     | 22                 |
| Noninfective Gastroenteritis & Colitis Unspecified | 22                 |
| BMI Ped >/Equal 95th% for Age                      | 22                 |
| Other Obesity Due to Excess Calories               | 21                 |
| Family Hx. Ischemic Hrt. Dz. Oth. Dz. Circ System  | 21                 |
| Abdominal Distension Gaseous                       | 20                 |
| Mixed Hyperlipidemia                               | 20                 |
| Post-Traumatic Stress Disorder Unspecified         | 20                 |
| Fatty Change of Liver Not Elsewhere Classified     | 20                 |



An analysis of MNT service utilization and patterns was conducted to determine how often patients receive services from a provider in a county that differs from their county of residence. The majority of patients received MNT services by a provider located elsewhere, often virtually.

Table 4 shows the number of members with a qualifying diagnosis, in order to offer insight about the potential opportunity for MNT services to benefit the populations. The third column shows the number of patients that received MNT services within the same county of residence. The fourth column shows the total number of patients that received MNT, regardless of the location of the provider. The data include providers that reside outside of Vermont.

The data show that for most counties, 3% or less of the population with a qualifying diagnosis received MNT services in 2022, and MNT is appropriate for a range of conditions in addition to the qualifying diagnoses. The low MNT use rates suggest strong potential for improvements in patient health with an increased use of MNT.

**Table 4: Covered Member Location, Qualifying Diagnosis, and Service Levels – CY 2022**

| <b>Location of Member</b> | <b>Members With Qualifying Diagnosis</b> | <b>Members With an MNT Provider</b> | <b>Members With an MNT Provider Located in the Same County</b> | <b>Percent of Members With Qualifying Diagnosis and MNT</b> |
|---------------------------|--|-------------------------------------|--|---|
| Addison                   | 8,997                                    | 260                                 | 85   | 3%  |
| Bennington                | 10,071                                   | 69                                  | 8  | 1%  |
| Caledonia                 | 8,190                                    | 201                                 | 94   | 2%  |
| Chittenden                | 35,879                                   | 2,732                               | 2,128  | 8%  |
| Essex                     | 1,996                                    | 33                                  | -  | 2%  |
| Franklin                  | 12,532                                   | 348                                 | 78   | 3%  |
| Grand Isle                | 2,221                                    | 74                                  | -  | 3%  |
| Lamoille                  | 6,024                                    | 169                                 | 18   | 3%  |
| Orange                    | 7,187                                    | 150                                 | 21   | 2%  |
| Orleans                   | 7,554                                    | 93                                  | 1  | 1%  |
| Rutland                   | 18,027                                   | 508                                 | 179  | 3%  |
| Washington                | 15,258                                   | 496                                 | 178  | 3%  |
| Windham                   | 10,972                                   | 183                                 | 2  | 2%  |
| Windsor                   | 14,622                                   | 261                                 | 2  | 2%  |

The data were stratified by gender<sup>iv</sup> and age group<sup>v</sup> to determine patterns across demographic variables. For CY 2022, females aged 65+ had the highest number of members with qualifying diagnoses (44,260) but notably the lowest number of members who received MNT services (367) among all female age groups. Males aged 65+ had the second highest number of members with qualifying diagnoses (39,718), and matched the pattern reflected in the female age group with the lowest utilization of MNT (237) among all male age groups. Both males and females aged 65+ appeared to utilize DSMT services more than any other age group (166 for males; 156 for females). Females aged 18 – 34 were the most likely to receive any MNT services (1,108), second to females aged 35 – 49. These findings suggest that outreach to members aged 65+ could be beneficial, as they have the highest volume of qualifying diagnoses but lowest levels of MNT utilization.

**Table 6: Age and Gender, Qualifying Diagnosis, and Service Levels**

| Age and Gender | Members With Qualifying Diagnosis | Percent of Members by Age and Gender | Members With MNT | Percent of Members With Qualifying Diagnosis and MNT | Members With Initial MNT | Percent of Members With Qualifying Diagnosis and Initial MNT |
|----------------|-----------------------------------|--------------------------------------|------------------|--|--------------------------|--|
| <18 F          | 1,768                             | 1%                                   | 657              | 37%  | 445                      | 25%  |
| <18 M          | 1,688                             | 1%                                   | 495              | 29%  | 356                      | 21%  |
| 18 – 34 F      | 6,427                             | 4%                                   | 1,108            | 17%  | 780                      | 12%  |
| 18 – 34 M      | 4,138                             | 3%                                   | 268              | 6%   | 191                      | 5%   |
| 35 – 49 F      | 9,812                             | 6%                                   | 997              | 10%  | 671                      | 7%   |
| 35 – 49 M      | 9,342                             | 6%                                   | 308              | 3%   | 216                      | 2%   |
| 50 – 64 F      | 20,782                            | 13%                                  | 852              | 4%   | 590                      | 3%   |
| 50 – 64 M      | 22,309                            | 14%                                  | 340              | 2%   | 239                      | 1%   |
| 65+ F          | 44,260                            | 28%                                  | 367              | 1%   | 234                      | 1%   |
| 65+ M          | 39,718                            | 25%                                  | 237              | 1%   | 156                      | 0%   |
| <b>Total</b>   | <b>160,244</b>                    | <b>100%</b>                          | <b>5,629</b>     | <b>4%</b>  | <b>3,878</b>             | <b>2%</b>  |

To assess trends over time and consider the potential impact of the public health emergency, data were queried from 2019 to 2022. When focusing on qualifying diagnoses at both the county and state levels, as well as the utilization of MNT and DSMT services, the findings indicate a relatively consistent pattern of stability with trends that were flat. This suggests the prevalence of these conditions remained relatively constant during these years.

<sup>iv</sup> Among claims pulled from the VHCURES, gender was reflected as a binary category: female or male.

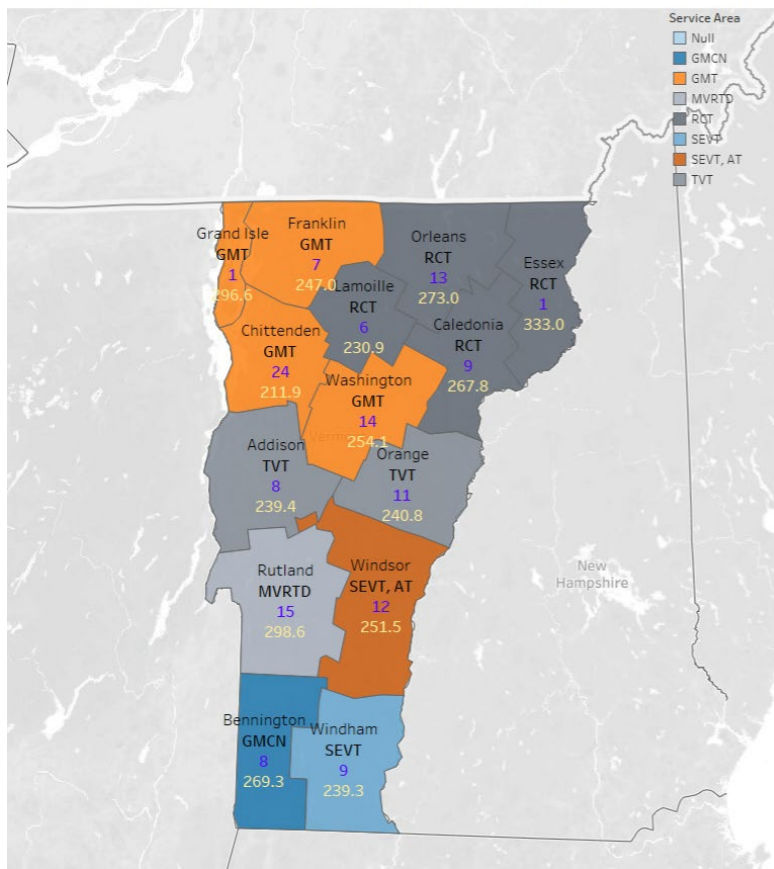
<sup>v</sup> The age groups are: < 18, 18 – 34, 35 – 49, 50 – 64, and 65+.

The VHCURES data were supplemented by 2022 U.S. Census Bureau data to obtain annual estimates of the resident population by county, Vermont Department of Health 2017 grocery store data to obtain the distribution of grocery stores in VT, and VT Agency of Transportation 2022 data.<sup>33,34,35</sup> Utilizing the count of members with a qualifying diagnosis from the VHCURES and the 2022 Census data, a rate of qualifying diagnosis member count per 1,000 was computed and compared to the distribution of grocery stores by county (see Figure 2). The state average rate was 247 stores per 1,000, with a range of 212 per 1,000 (in the most populous county Chittenden) to 333 per 1,000 (in the least populous county Essex). The number of grocery stores is generally inversely associated with the rate range, with Chittenden having the highest number of grocery stores (24) and Essex having the lowest (1). Although Grand Isle also had one grocery store, it had the third highest rate of qualifying diagnosis member count per 1,000 at 297; Rutland had 15 grocery stores and the second highest rate (299 per 1,000). Caution should be exercised with interpreting these rates due to the low number of grocery stores and variation due to the small numbers considered.

**Figure 2: Grocery Stores and Member Rates of Qualifying Diagnoses**

Public Transportation Service Areas, Number of Grocery Stores, and Qualifying Diagnosis Member Count per 1,000 by County

(VT Agency of Transportation 2022, VDH Grocery Store Data 2017, and U.S. 2022 Population Estimates)



## 8.0 Additional Data

### Food Insecurity

Food insecurity is defined as a household-level economic and social condition of limited or uncertain access to adequate food.<sup>36</sup> Food insecurity is a possible barrier to increasing MNT use and was discussed with RDs during interviews. The State of Vermont was favorably recognized for its efforts to reduce food insecurity, and several programs were mentioned as helpful initiatives. Although food insecurity was not identified as one of the top barriers by RDs, aspects of the discussion reflected related challenges that select patient populations are facing. Referring providers and RDs exercise judgment about a patient's chances of being successful with MNT, and food insecurity could make favorable outcomes less likely among some populations. A sample of the information on food insecurity in Vermont includes:

- In 2022, 57,150 people, including 12,040 children, experienced hunger.
- One in eleven people and one in ten children were affected by hunger.
- The population of individuals experiencing food insecurity need an additional \$40,178,000 annually or \$3,348,000 monthly to fulfill their food requirements.<sup>37</sup>

Food insecurity profoundly affects the health of children and adults. In rural Vermont, the challenge of accessing nutritious food significantly contributes to this issue. In 2018, approximately one-quarter of Vermont towns have 25% or more households living below 150% of the Federal Poverty Level (FPL), and three out of every ten of these towns face limited availability of healthy food options.<sup>38</sup>

Hunger Free Vermont reports that, on a daily basis, 10% of Vermonters face hunger. This figure rose to 33% in 2020, highlighting the pressing concern of food insecurity. The United States Department of Agriculture (USDA) recognizes food and nutrition security as a crucial goal because poor nutrition can lead to illness, increased healthcare costs, and health disparities that disproportionately affect certain groups. Access to sufficient, nutritious food is especially critical for children, as it enhances learning outcomes and reduces behavioral issues, anxiety, and health problems such as obesity. Adults who have access to an adequate food supply also experience fewer health challenges.

An unhealthy diet, lack of physical activity, and tobacco use elevate the risk of four chronic diseases:

- Cancer
- Heart disease and stroke
- Type 2 diabetes
- Lung disease

These diseases account for over 50% of all deaths in Vermont. Initiatives like 3SquaresVT and SNAP-Ed provide resources that help reduce barriers to healthy eating and physical activity, ultimately impacting the prevalence of chronic diseases.<sup>39</sup>

### **Vermont Health Department: Programs Supplemental to MNT**

- The Vermont Health Department offers DSMES programs. Although the focus of these programs is on diabetes, the services provided are helpful for people with other diagnoses, such as hypertension and heart disease. Funding for these programs has come from a CDC Center for Health Promotion and Disease Prevention Grant (HPDP) for diabetes self-management and support and a fixed amount payment from the Agency of Health Services' (AHS's) global commitment Medicaid waiver.
- The Vermont Health Department (VHD) offers workshops through the MyHealthyVermont<sup>vi</sup> program. This program is designed to supplement medical diabetes programs. The VHD performs direct-to-consumer advertising through such channels as television and social media. Consumers self-refer to the program and are not billed for the services. Because more workshops have moved online, capacity has increased, and there is room for about 40% more enrollees.
- Participation in the program may or may not end up in the enrollee's EHR, depending on who (i.e., which sub-awardees) provides services. The DSMES team partners with Support and Services at Home (SASH) to promote A1C testing<sup>vii</sup> and provide wellness services.
- The VDH also provides more general workshops, including ones for chronic disease and asthma.

## **9.0 Limitations and Opportunities**

The VHCURES provides an invaluable resource for understanding healthcare costs and utilization in Vermont. The data provided an objective resource to help better understand the coverage and delivery of MNT. In addition to excluding data on claims denials, the VHCURES data do not include reliable information on the referring provider. Both of these data elements would enhance the ability to analyze barriers and use of MNT. To help ensure patient privacy, extensive policies and procedures are associated with data submission and release of the VHCURES. Attempting to obtain detailed information on claim denials and referrals from other data sources can also raise issues with protecting patient privacy. The resources associated with collecting data separately are significant, so between helping ensure patient privacy and making the best use of resources, the DFR and BerryDunn did not pursue obtaining related data from healthcare organizations or the carriers directly.

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<sup>vi</sup> <https://www.myhealthyvt.org/>

<sup>vii</sup> The A1C test is also called glycosylated hemoglobin, glycosylated hemoglobin, hemoglobin A1C or HbA1c. It is a common blood test that can diagnose prediabetes, type 1 and 2 diabetes, and monitor a diabetes plan. <https://www.mayoclinic.org/tests-procedures/a1c-test/about/pac-20384643>

BerryDunn used historical VHCURES claims data to perform our analysis of MNT utilization, coverage, and access in Vermont. Claims data can provide an insightful picture of payments made by Medicare, Medicaid, commercial payers, and patients to healthcare providers. However, they are subject to claims processing issues and data consolidation problems and provide a retrospective view. BerryDunn tested the data to help ensure the integrity of the analysis, but limits that cannot always be identified will exist with any administrative data.

Member diagnoses were grouped using the Clinical Classification Software Revised (CCSR) category available from the Agency for Healthcare Research and Quality, which provides a broad classification of diagnosis codes into categories. The categories may not capture nuances of certain medical conditions or detailed information about patient diagnoses. Additionally, CCSR may not always be up to date with the rapid changes and updates in diagnosis code sets. This can lead to discrepancies or outdated groupings. There can be significant variation in how healthcare providers document and code diagnoses. CCSR might not capture these variations accurately, leading to potentially misleading categorizations.

Feedback from providers and carriers indicated that commercial insurance coverage includes MNT, but internal policies associated with coverage vary extensively among carriers. A formal survey of carriers was not performed, and additional follow-up work might include a data call by the DFR to regulated entities. Additional research on benefit designs and reimbursement policies may also provide insight about the low use of group therapy and other observations with the data.

MNT benefit restrictions with Medicare coverage were identified, and these restrictions most likely influenced the observations of lower MNT and higher DSMT utilization within this population. However, we should be cautious about assuming a causal association between the benefit limitations and the observations. Additional research to identify differences in perception of MNT by the Medicare population and other factors that may explain the lower use rates may be helpful with identifying barriers to effective use of MNT by Medicare beneficiaries.

With the assistance of the DFR, several interviews took place with healthcare providers offering MNT. The feedback from these interviews guided our understanding of the data, use of MNT, characteristics local to Vermont, and MNT barriers and opportunities. However, this was a limited sample of provider experiences to draw upon, and caution must be exercised when making broad general conclusions about the status of MNT in Vermont. A more robust provider survey would still contain methodological issues but would provide a higher degree of reliability and predictability when drawing conclusions about barriers to improving MNT use in Vermont.

The VHCURES may present opportunities to design predictive models that could infer referrals from specific providers for MNT based on the frequency that individual providers see patients who later obtain MNT services. The model could potentially provide insight about the referral patterns and characteristics of providers and provider specialties who are most likely to utilize MNT in a patient's treatment plan. Exploring these opportunities was outside the scope of this analysis and not attempted.

EHRs continue to evolve in their technical ability, comprehensiveness, and interoperability, furthering the sharing of clinical information and patient outcomes. Further exploration of EHR

capabilities and data reporting may provide opportunities to better understand MNT and improve access to nutritional counseling therapy in Vermont.

The VHCURES include prescription drug claims in addition to medical claims. Developing a study design that focuses on weight loss prescriptions and MNT may lend additional insight about existing treatment patterns and opportunities for more appropriate use of MNT in Vermont.



## Appendix

### *Other States' Coverage*

- Some states currently have legislation that includes MNT as a required service—either as independent legislation or in conjunction with disease-related legislation, such as diabetes.
- Washington (WA) requires MNT to be delivered by a registered dietitian who has a current core provider agreement with a Medicaid agency and has an NPI.<sup>40</sup>

As of 2023, seven states had bills pertaining to nutrition practitioners.<sup>41</sup> Nebraska's (NE's) bill, NE LB572, would “provide, change, and eliminate provisions relating to the Medical Nutrition Therapy Practice Act,” but was indefinitely postponed on June 1, 2023. This bill aimed to regulate the practice of MNT in response to the legislature's recognition that NE had not adequately protected the health, safety, and welfare of individuals. The bill imposed for dietitians and nutritionists to undergo professional education, training, and experience.<sup>42</sup> Arizona (AZ) introduced AZ HB2558 in January 2023 that would revise definitions for licensed dietitian nutritionists, qualified nutrition professionals, and hospitals orders, including those pertaining to MNT to emphasize licensure qualifications.<sup>43</sup> Michigan (MI) also has passed HB4608 that addresses health occupations, including dietitians and nutritionists, and the licensure of these professions. This bill also includes definitions on the “practice of dietetics and nutrition” that reflects “the integration and application of scientific principles derived from the study of food, nutrition, biochemistry, metabolism, nutrigenomics, physiology, food systems and management, and from behavioral and social sciences in achieving and maintaining health throughout the lifespan and in providing nutrition care services, including the practice of medical nutrition therapy, for the prevention, management, and treatment of diseases or medical conditions.”<sup>44</sup>

- MNT can be considered a nutrition support under 1115 waiver demonstrations that can cover broader HRSNs. CMS has granted approval to AR, MA, and OR, allowing Medicaid and CHIP members to utilize their benefits for food and nutrition services. All three states cover nutrition counseling and education, but MA and OR also cover medically tailored meals (up to three meals a day for up to six months, for qualifying eligible members). In MA, members could also be eligible for cooking supplies if required for healthy meal preparation. In accordance with the waiver, states must report program utilization and healthcare outcomes to determine the program's efficacy.<sup>45</sup>



Table A1: CPT/HCPCS Reference Table<sup>46</sup>

| CPT/HCPCS    | DESCRIPTION   |
|--------------|---|
| <b>97802</b> | MNT; initial assessment and intervention, individual, face-to-face with the patient, each 15 minutes. This code is used for the initial visit.  |
| <b>97803</b> | Reassessment and intervention, individual, face-to-face with the patient, each 15 minutes.  |
| <b>97804</b> | Group (two or more individuals), each 30 minutes.   |
| <b>G0270</b> | MNT; reassessment and subsequent intervention(s) following a second referral in the same year due to a change in diagnosis, medical condition, or treatment regimen (including additional hours needed for renal disease). This service is provided on an individual basis in a face-to-face session with the patient and is billed for each 15 minutes of service. |
| <b>G0271</b> | MNT; reassessment and subsequent intervention(s) following a second referral in the same year due to a change in diagnosis, medical condition, or treatment regimen (including additional hours needed for renal disease). This service is provided to a group of two or more individuals and is billed for each 30 minutes of service.                             |

#### Coverage in Vermont

#### Commercial Health Plans

Commercial health insurers often cover medically necessary MNT for their members. Coverage limitation differs depending on the plan, product, and member diagnosis(es). For example, one plan covers three hours of one-on-one MNT counseling services during a member’s first year of services, and up to two hours annually thereafter for members diagnosed with diabetes, end-stage renal disease (but who are not on dialysis), or who have had a kidney transplant. Other plans cover MNT for individuals diagnosed with obesity and include group sessions for DSMT. Another example is requiring prior authorization for continued treatment after three visits. Plans may also include associated diagnostic tests performed by RDs in conjunction with the delivery of MNT services. One plan noted that only RDs can bill for MNT and included coverage of MNT for chronic diseases in “which dietary adjustment has a therapeutic role” (i.e., eating disorders, metabolic syndrome, coronary artery disease, hyperlipidemia, chronic kidney disease, hypertension, prediabetes, and diabetes).<sup>47,48,49,50</sup>

#### Medicare

- Medicare Part B covers MNT for diabetes and kidney disease.<sup>51</sup>
- Medicare provides three hours of coverage for MNT during the first year when the member has a diagnosis of renal disease or diabetes. In subsequent years coverage is for two hours.

- When referred by a physician level provider, MNT and DSMT are covered when medically necessary and provided on different days. Medicare will not reimburse DSMT if MNT was provided on the same day.<sup>52</sup>

## Medicaid

- VT Medicaid covers MNT, including diagnostic and counseling services, when medically necessary and prescribed by a qualified health professional (physician, physician assistant, nurse practitioner, osteopath, naturopath) for the management of a nutrition-related medical condition. MNT must be provided by an RD.

## *MNT Provider Requirements*

- Provider requirements vary:
- In order to practice MNT, most states consider RD to be the entry-level credential required. Some states do not recognize RD credentials and instead use “qualified nutrition professional.” Licensing of professionals falls under each state’s mandated requirement, and CMS defers to state requirements. Thus, if a state deems MNT services fall under the purview of a nutrition professional, then coverage for MNT adheres to that same requirement.<sup>53</sup>
- Vermont does not have a state certification requirement for providing nutrition services. However, Title 26, Chapter 73 stipulates that to be eligible for certification as a dietitian, applicants must meet the following requirements:
- (1) Must adhere to all the provisions outlined in this chapter and the rules established in accordance with it.
- (2)(A) Must provide evidence of registration as a registered dietitian by the Commission on Dietetic Registration; or
- (B) Must have:
- (i) Attained a bachelor's or higher degree in dietetics from an accredited college or university; and
- (ii) Successfully completed a minimum of 900 practicum hours under the supervision of a dietitian registered by the Commission on Dietetic Registration under the Academy of Nutrition and Dietetics; and
- (iii) Passed an examination to the director's satisfaction.
- After meeting these requirements, providers can use the title “certified dietitian.” Vermont does not currently have state certification requirements for providing nutrition care.<sup>54</sup>
- For managed care organizations in Vermont, Section 5.2, Credentialing Verification Practices of Department Rule H-2009-03, states that “each managed care organization shall verify the credentials of all contracted healthcare providers. The managed care

organization shall establish procedures to review and evaluate provider credentials both upon application of the healthcare provider to become employed by or to contract with the managed care organization and at least once every three (3) years thereafter.”<sup>55</sup>

#### *Network Adequacy*

Vermont DFR Rule H-2009-03, Section 5.1, outlines network adequacy standards that managed care organizations must adhere to for consumer protection, but the rule does not address RDs for MNT directly. The rule creates the expectation for access to in-network primary care providers within 30 minutes and specialty care providers within 60 minutes. Waiting times are also included and specified as two weeks for non-emergency care and 90 days for preventive care.

Federal network adequacy requirements with time and distance standards for a range of specialties and services exist as well, but do not include standards for MNT or RDs.

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