



# We Are the Champions, My Friends: Adventures in Diabetes Care and Education

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As health care providers (HCPs) working with people with diabetes, we often do not realize how impactful our interactions are with them. Working in diabetes can be just a job to some; however, to fully realize our full potential, I suggest that we look at it from a different perspective: diabetes care and education as an amazing adventure that has the ability to help those with diabetes live life to the fullest.

Data published in the past 15 years and reviewed in detail in recent guidelines and consensus reports (1,2) have shown that ongoing diabetes self-management education and support (DSMES) has many positive outcomes. The benefits of DSMES include clinical, psychosocial, and behavioral outcomes, as well as improved quality of life. A key clinical benefit is improvement in A1C. Studies have shown that DSMES results in an average A1C reduction of 0.45–0.57% compared with usual care for people with type 2 diabetes, as well as reductions in the onset and worsening of diabetes-related complications and a reduction in all-cause mortality. DSMES promotes lifestyle behaviors including healthful meal planning and engagement in regular physical activity, which aid in reduction in A1C, blood pressure, and cholesterol. In addition, participation in DSMES services shows enhancement of self-efficacy and empowerment, increased healthy coping, and decreased diabetes-related distress. These improvements clearly affirm the importance and benefits of using DSMES and justify efforts to facilitate participation as a necessary part of quality diabetes care (1,2).

As shown in Table 1, data reported in 2021 by DSMES programs recognized by the American Diabetes Association (ADA) Education Recognition Program (ERP) (American Diabetes Association, data on file) showed that >77% of participants

had a reduction in A1C, with average A1C decrease of 2%. Eighty-two percent of participants had a decrease in emergency department visits, >84% had a decrease in hospital admissions, and nearly 70% had a decrease in weight, with a mean weight loss of 5.6 lb. To put these data into perspective, there are ~1,400 ADA-recognized DSMES programs with 7,000 staff members, including certified diabetes care and education specialists, and these programs engaged with >700,000 participants in 2021. The power of these DSMES champions proves how crucially important it is for all people with diabetes to have ongoing access to diabetes care and education.

Table 2 includes additional data from the ADA ERP's Chronicle Diabetes electronic data collection platform, which is used by about one-fourth of ADA-recognized programs (American Diabetes Association, data on file). These data on attendance and no-show rates for both 1:1 and group education sessions suggest that participants who attend these programs are engaged and interested. Moreover, these data support the notion that any amount of education may empower people with diabetes to embrace their diabetes adventure and feel inspired to make necessary changes.

The Centers for Disease Control and Prevention reported that only 6.8% of privately insured individuals with newly diagnosed type 2 diabetes participated in DSMES within 12 months of their diagnosis in the 2011–2012 period. Furthermore, the Centers for Medicare & Medicaid Services affirmed that only 5% of Medicare participants receive diabetes self-management training (DSMT; the term Medicare uses for DSMES) during the first year after their diagnosis. Medical nutrition therapy (MNT) services appear to

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**TABLE 1** ADA ERP Operations: National Benchmarks

Clinical Outcome	Mean Change
Participants with a decrease in A1C	77.4
Decrease in A1C	2.0
Decrease in emergency department visits	82.0
Decrease in hospital admissions	84.4
Participants with a decrease in weight	67.9
Actual decrease in weight	5.6

Data were reported by ADA-recognized DSMES services in 2021. Values are % change except for actual decrease in weight, which is pounds.

be even more underutilized, with only 0.5% of Medicare beneficiaries receiving initial MNT in 2018 and 0.4% in 2020 (Figure 1). Anecdotally, the approval of reimbursement for telehealth services seems to have increased these numbers slightly. Nevertheless, it is essential to identify and use resources that can help to eliminate all barriers to essential DSMES and MNT services, including those related to health systems, HCPs, people with diabetes, and the larger environment (3–6).

So, what do people with diabetes have to say about diabetes self-management? The most common complaint we hear, which focuses on the dynamic and chronic nature of diabetes, frequently leads to emotional distress. Many people with diabetes believe that the need for them to make frequent adjustments to their diabetes self-care practices means that they must be doing something wrong. Additional burdens include diabetes-related costs, limited accessibility to support, and a low level of readiness to change. Unrealistic expectations, differing perceptions of appropriate care, and conflicting advice about self-management from HCPs, family, and friends—especially who do not have diabetes—also place a large burden on people with diabetes and make it difficult for them to navigate and determine what aspects of self-care are truly right for them (7).

Let’s focus on the positive, though: the factors that foster the ability of people with diabetes to undertake their recommended self-management plan. Although we know these

**TABLE 2** ERP Operations: Additional Data

Class/Session Type	Sessions, n*	Attendance, %	No-Shows, %
1:1	107,481	97.5	0.7
Classroom/group	24,463	76.8	8.1
1:1 and group	4,148	79.3	5.3
Total sessions	136,092	—	—

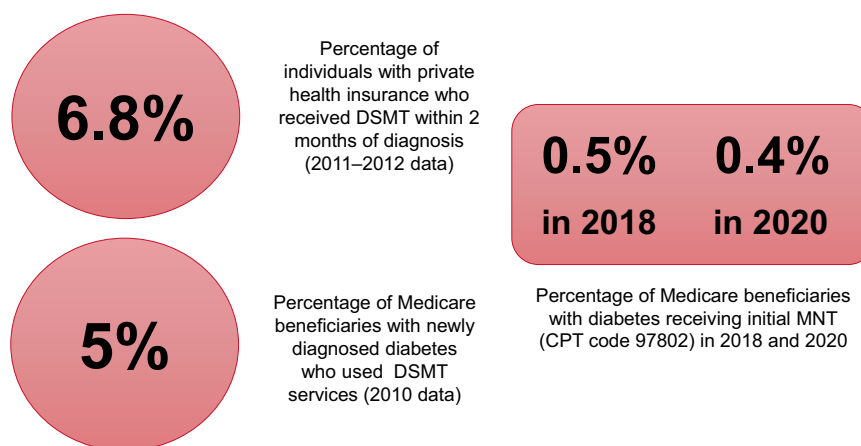
Data were reported by ADA-recognized DSMES services in 2021 using the Chronicle Diabetes ePlatform. \*Documented as the number of person-sessions. For example, a four-session class with 10 participants would be considered 40 sessions.

factors are diverse, effective social support is an essential component, along with assistance and encouragement from family members and peers who have diabetes or are familiar with its management (7). Determination to prevent or reduce diabetes complications and active engagement on the part of people with diabetes themselves can help to ensure successful diabetes self-management. Positive self-care experiences are also dependent on effective communication between people with diabetes and their HCPs that is characterized by trust, respect, and shared decision-making in setting health goals and developing treatment plans. And, of course, the availability of ongoing DSMES and the use of diabetes technology also play key roles.

What is the takeaway here? Breaking down barriers starts with listening to what people have to say; really hearing them when they verbalize their needs, fears, and goals; and focusing on what they want, need, and are willing to do (7).

Now let’s talk about the key diabetes management activities that all people with diabetes are told they must change. How do they feel they are doing? Data from the 2014 National Diabetes Education Program National Diabetes Survey of >2,500 individuals show that more than half were not totally confident with key areas, including exercising, preventing hypoglycemia during activity, blood glucose monitoring, knowing when to visit the doctor, choosing appropriate foods when hungry, eating meals or snacks as recommended, and following a meal plan. A closer look at the key lifestyle factors of nutrition therapy and physical activity found that only 28% were totally confident following meal plan recommendations, 22% were confident choosing appropriate foods when hungry, and 25% were totally confident following their activity goals (8). How do we, as champions for people with diabetes, help them to feel more confident with the goals that we set with them.

The 2021 ADA/European Association for the Study of Diabetes (EASD) consensus statement on management of type 1 diabetes in adults (9) included the four critical times for DSMES, underscoring the point that DSMES is not a one-and-done proposition, but rather is an evolving process through which needs may change from visit to visit. The four critical times remain the same as have been recommended in the ADA’s *Standards of Medical Care in Diabetes* for several years—namely, at diagnosis, annually and/or when not meeting treatment targets, when complicating factors develop (medical, physical, or psychosocial), and when transitions in life and care occur (1). However, the content in the ADA/EASD consensus statement is slightly different in that the critical time related to transitions includes transitions from



**FIGURE 1** Data underscoring the underutilization of DSMES/DSMT and MNT among people with diabetes (3–6). CPT, Current Procedural Terminology.

pediatric to adult care for young adults who developed diabetes as a child, as well as at the time of initiation and intensification of diabetes technology use (9).

An especially important aspect of providing DSMES is the adventure of staying ahead of the curve and thereby being able to offer people with diabetes new information, give them sneak previews into exciting new products in the development pipeline, and help them learn and grow by using exciting new diabetes management tools.

Whether we are meeting a new person with diabetes or seeing someone routinely over the course of 20 years or more, the adventure of providing DSMES starts with what each person with diabetes wants and needs. For me, every person with diabetes who I work with is, without question, a hero. That these individuals trust me enough to listen to my suggestions and take them for a test drive means the world to me. The most rewarding part of my work is in helping them navigate the highs and lows of their diabetes management and indeed their life during every minute of every day. And, through the years, I have learned that throwing all of the diabetes knowledge in my brain at the person or family or couple sitting in front of me may be necessary on the very first day. Rather, accepting people and meeting them where they are can give them a reason to come back to continue the education and journey at subsequent visits.

DSMES hinges on fostering relationships based on mutual respect, and how we talk to people can play a surprisingly big role in that effort. As Dickinson et al. (10) eloquently wrote and the ADA Standards of Care later incorporated (1), to truly be champions for people with diabetes, we must use language that is neutral, nonjudgmental, and based on facts, actions, or physiology and biology; is free from stigma;

is strengths based, respectful, inclusive, and imparts hope; fosters collaboration between patients and providers; and is person centered to aid in building hope and reducing stigma. Toward that end, we must all avoid using negative or judgmental terms such as adherence, control, compliance, cheating, and failure in our discussions about diabetes self-management. Instead, we should strive to focus on the more positive concepts of engagement, participation, collaboration, and choices. At all times, we must remember that the people sitting in front of us are much more than their diabetes (10–12).

We all play a part in this adventure. How do we help people with diabetes enjoy their lives more and minimize the stress of diabetes? We need to listen to what they need and want and not put words in their mouths. During visits, perhaps we can focus first on what went well with their diabetes self-management. Then, we can ask what they think they need to work on more. We should embrace the teachable moments—whether we’re explaining the importance of insulin pump site selection and rotation or the best way to treat hypoglycemia—and make every minute count. Remember, too, that when it comes to DSMES, quantity does not always equal quality. Finally, we can reach more people with diabetes by working together, learning from others, and teaching our colleagues who are newer to the profession what we have learned over time.

Should you choose to accept it, your mission to be a champion and embrace the adventure of DSMES can be carried out in a number of ways.

First, encourage more referrals for DSMES and MNT. Newly diagnosed people with diabetes who are insured are eligible to receive 10 hours of DSMES/DSMT and 3 hours of MNT in the first year. In every subsequent year, they are eligible for

2 hours of each. What many people may not know is that, after the initial 2 hours of MNT has been used, a second referral can be written for unlimited MNT hours, provided that the referral stipulates that there has been a change in diagnosis, medical condition, or treatment regimen. We know that people with diabetes are not always confident when it comes to DSMES and MNT. Let's be their champions and advocate for them to get the attention they deserve from us.

In addition, everyone with diabetes needs some kind of ongoing support. It is our responsibility to promote mental health care, normalize it, and make it a routine part of diabetes management.

We can also expand the support that people with diabetes receive, both within our clinics and beyond. During intake or triage, how are our medical assistants and clinic staff members interacting with our patients with diabetes? Those are also valuable teachable moments, so ask your clinic staff to reinforce key concepts at every encounter. In addition, industry offers many free resources for ongoing support. We can make people with diabetes aware of these resources. If they choose to use them, it could be the difference between engaging more in their self-care and giving up. Support groups can also be a lifeline. Although I live by the maxim, "Your diabetes may vary," having the support of others who know what you are going through can be invaluable. In some cases, social media can expand our world and allow those who may have felt isolated before to find peers with diabetes with whom they can meaningfully engage. Finally, there are countless high-quality resources available for sharing from the ADA's website ([www.diabetes.org](http://www.diabetes.org)).

During the coronavirus disease 2019 (COVID-19) pandemic, it quickly became apparent that telehealth has many virtues. Keeping this valuable tool as an option even when we are not in the midst of a global health crisis can be an important way to increase options for DSMES delivery. In a national survey of 1,452 individuals with type 1 diabetes who reported using telehealth services during the COVID-19 pandemic, 85% felt that telehealth saved them time, 44% felt that it saved them stress, and 29% felt it saved them money compared with receiving in-person care. Additionally, 62% of these individuals felt that telehealth was as effective as or more effective than in-person care for type 1 diabetes management, and 82% stated that they would prefer to use telehealth for some or all of their future diabetes appointments (13).

Likewise, it is important to advocate for continued reimbursement of remote data review, with asynchronous feedback as well as real-time telephone or video visits. In addition, we must strenuously advocate for the extension of cellular and Internet capabilities into remote and rural

geographical locations to increase the reach of DSMES to underserved individuals and communities.

Each of the ADA's key priorities affect and include all of us; therefore, advocacy is everyone's responsibility. We must speak out on issues such as making insulin more affordable for all, expanding the availability of diabetes technology, improving access to healthy foods, and working to achieve health equity. We all need to make our voices heard.

When it comes to DSMES specifically, we can no longer sit back and think, "My organization pays me to see people with diabetes, and I do not have to think about reimbursement, revenue, or the costs to the people with diabetes." DSMES services continue to close across the country, and the value of DSMES is often understated. On this crucial point, we all must make our voices heard for the sake of all people with diabetes, present and future. To paraphrase the immortal words of Freddie Mercury and his bandmates in Queen, "We are the champions, my friends, and we'll keep on fighting 'til the end for all people with diabetes!"

Thank you for the distance we have come so far together on this incredible adventure.

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