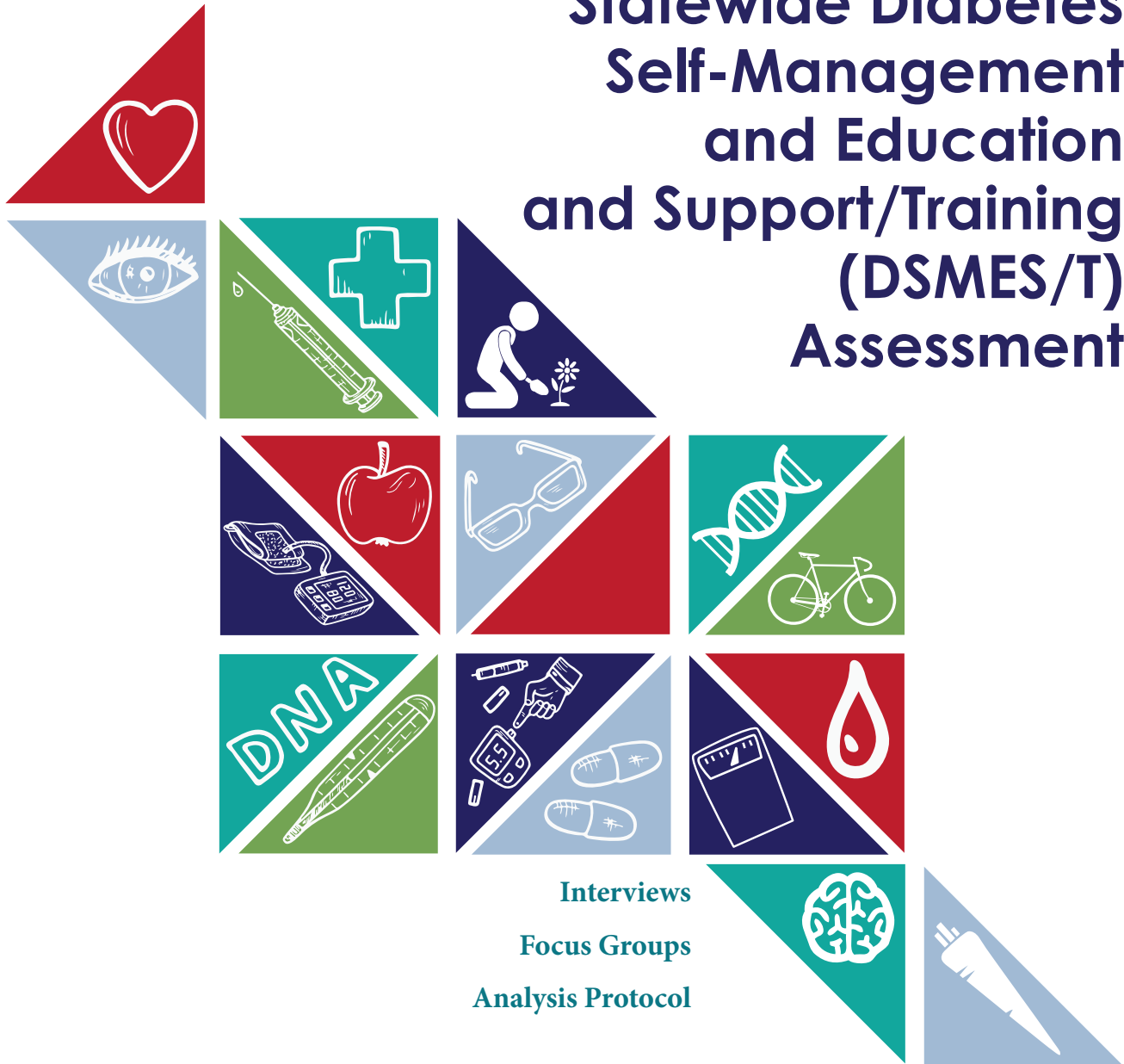


Statewide Diabetes Self-Management and Education and Support/Training (DSMES/T) Assessment



JUNE 2019

Prepared for:
Diabetes, Heart Disease and Stroke Prevention
Division of Public Health
Idaho Department of Health and Welfare

Prepared by:
Helen Brown MPH, RDN
Movement Sciences
University of Idaho



University of Idaho

College of Education,
Health and Human Sciences



IDAHO DEPARTMENT OF
HEALTH & WELFARE

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Table of Contents

Acknowledgements	2
Table of Contents.....	3
Terms.....	4
Project Overview	5
Summary	7
Diabetes Educator Interviews	9
Participant Focus Groups	30
Conclusions and Opportunities	38
Appendix	41
#1 Protocol	41
# 2 Project sites	58

List of Abbreviation of Terms

A1c	Hemoglobin A1c
AADE	American Association of Diabetes Educators
ADA	American Diabetes Association
ACO	Accountable Care Organization
CDC	Centers for Disease Prevention and Control
CDE	Certified Diabetes Educator
CGM	Continuous Glucose Monitor
CQI	Continuous Quality Improvement
DAI	Diabetes Alliance of Idaho
DM	Diabetes Mellitus
DSME	Diabetes Self-Management Education
DSMES/T	Diabetes Self-Management Education, Support, & Training
EHR/EMR	Electronic Health Record or Electronic Medical Record
IDHW	Idaho Department of Health and Welfare
IRB	Institutional Review Board
NFP	Nurse Family Practitioner
MNT	Medical Nutrition Therapy
PA	Physical activity
PA's	Physician Assistants
PCP	Primary Care Provider
QI	Quality Improvement
RDN	Registered Dietitian Nutritionist
RN	Registered Nurse

Project Overview

An assessment of factors related to the participation in and delivery of Diabetes Self-Management Education and Support/Training (DSMES/T) services was conducted by Helen Brown, University of Idaho, for the Diabetes, Heart Disease and Stroke Prevention, Division of Public Health, Idaho Department of Health and Welfare (Department).

The work was funded by the Centers for Disease Control and Prevention (6 NU58DP006554-01-01) to work with the Department to develop, administer, analyze, and disseminate results of a statewide assessment of the DSMES/T programs providing diabetes education in Idaho. The assessment included the following elements:

1. Diabetes Educator barriers surrounding enrollment, retention, and completion of DSMES/T programs.
2. Patient barriers surrounding enrollment and completion of the DSMES/T programs.
3. DSMES/T referral processes, disparate population reach, aggregate payor-source information, and aggregate number of patients served.

The end goal of the assessment is to inform the Department of any barriers, opportunities and strategies to enhance DSMES/T services, activities, and support for diabetes education in Idaho.

Project Design and Methods

The Statewide Diabetes Self-Management and Education and Support/Training (DSMES/T) Assessment utilized qualitative action research methods to conduct semi-structured interviews among Idaho DSMES/T Service Directors, Coordinators, and Educators (educators) and to conduct focus groups among DSMES/T participants. The project interview and focus group questions were developed to gain insight into DSMES/T service and successes and challenges to participation. The questions were informed by considerable review of peer-reviewed DSMES/T literature, careful attention to the DSMES/T 2017 Guidelines, and discussion and revision with Department staff. Slight modifications to the interview questions were made to more fully capture the unique context and challenges among DSMES/T services in Idaho. The exact methods employed and the primary

areas of inquiry for both the DSMES/T educators and DSMES/T participants are included in the project: “Interview, Focus Group, and Analysis Protocol” (Appendix 1).

The 60-90-minute DSMES/T educator interviews were conducted face-to-face (n=12) and remotely via phone (n=3). Fewer interviews were conducted than originally proposed as interviews were conducted only with DSMES/T service educators in the two largest DSMES/T service sites, rather than interviewing each individual educator; two educators declined an interview. Two DSMES/T programs (n=10) accepted an invitation to help recruit for DSMES/T participant focus groups. The two 60-90-minute DSMES/T participant focus groups were conducted in two distinct geographical regions of Idaho. The third site declined to participate due to time constraints. (See Appendix 2 for DSMES/T educator interview locations).

Informed consent was obtained from all interviewees and focus group participants. All interviews and focus groups were recorded, transcribed, and member checked. De-identified quotes (lightly edited for readability) were selected to highlight emergent themes. The transcripts for each interview and focus group were coded and categorized using inductive analysis and constant comparison. The evaluator shared and confirmed emergent themes with project staff. All interview and focus group recordings were destroyed at the completion of the project. No participant, DSMES/T site, or other identifiers were used in any aspect of the report findings and analysis.

The project proposal and scope of work was submitted for review to both the University of Idaho and State of Idaho Institutional Review Boards (IRB), Human Research Protections. The project was determined exempt from IRB review as the project was deemed evaluation and did not meet the criteria for research. Due to contractual delays and pending approvals, the interview and focus groups were not initiated until April 5, 2019 and were completed on May 10, 2019.

Diabetes Self-Management Education and Support/Training (DSMES/T) Questions

The DSMES/T educator interview questions were designed to better understand drivers, barriers, and opportunities to increase the number, reach, and participation in DSMES/T services for individuals with Type 2 diabetes. It was not the intention of the project to assess the quality and the impact of the DSMES/T services provided. The findings are presented as actionable DSMES/T service issues and concerns to consider efforts to expand DSMES/T opportunities in Idaho.

The DSMES/T participant focus group [listening group] questions were designed to better understand factors that enhance or detract people with diabetes from seeking out and completing DSMES/T services. It was not the intention to assess the quality nor the health impacts of the DSMES/T services received.

The term ‘participant’ is used throughout this report to describe people seeking care for DSMES/T unless a direct quote uses a different word, such as ‘patient’. The term ‘health care provider’ is used to describe medical professionals providing direct medical care for people with diabetes.

Statewide Diabetes Self-Management and Education and Support/Training (DSMES/T) Assessment Summary

KEY FINDINGS of the DSMES/T assessment were obtained through DSMES/T Educator interviews and supported by DSMES/T participant focus groups.



DSMES/T Service Delivery *Structure, capacity, and staffing*

- Services delivered in hospital and primary care setting (private and non-profit) and one public health setting.
- Limited access of services in rural areas.
- Most DSMES/T educators are Certified Diabetes Educators (CDE) or in process to obtain certification. The majority of educators have decades of experience.
- Access to CDEs is challenging in rural areas, notably among Registered Dietitians
- Capacity to provide service to participants is most limited by health provider referrals, staffing, and facilities/space.
- The majority of services are rendered to people age 65 who receive Medicare. Few sites can offer services outside of business hours.
- Working participants find accessing services more difficult and costlier.



Education & Support *Participants, Educators, and Health Care Providers*

- Services are participant-centered and follow the DSMES/T Standards of Care. Participants enjoy tailored education and group support.
- Group education occurs generally in larger service sites; smaller, rural programs most often offer DSMES/T services individually.
- Participation in DSMES/T is most limited by lack of referrals and support for services, cost, poverty, work schedules, transportation, and limited understanding of the service benefits.
- Advances in diabetes technology increases demand for device education.
- Current, free or affordable, non-branded, lower literacy diabetes educational materials are needed in multiple languages.
- Psychosocial issues are identified as the greatest challenge in service delivery.
- Nutrition education identified as an educational need for non-nutrition educators; many educators seek information on medication and technology.

- Some sites offer CDE examination fees and monetary support for continuing education. Access to free or low-cost continuing education is increasingly limited.



Knowledge, Attitudes, & Beliefs

Implications for DSMES/T Services

- Overall knowledge and awareness of diabetes is limited; people with diabetes lack awareness of the existence and the benefits of DSMES/T.
- Fear, discouragement, fatalistic views, and shame are common attitudes among people with diabetes.
- DSMES/T services are viewed favorably; participants express improved health outcomes, and greater self-efficacy to manage diabetes.
- Confusion occurs when people with diabetes receive incompatible information from the media, health care providers and educators.
- Lack of knowledge about diabetes and self-management practices are DSMES/T barriers.
- Health care providers' favorable attitudes greatly impact DSMES/T participation.
- Educators perceive a lack of awareness of the benefits of DSMES/T among some health care providers.



Communication

Referrals, follow-up, and documentation.

- Compatible electronic health records (EHRs) greatly increase CDEs' ability to make and receive referrals, document services, and provide follow-up care.
- Sites without compatible EHRs have difficulty communicating with health care providers and obtaining needed medical information.
- Educators often have to create templates to meet accreditation reporting guidelines; compiling information is time consuming if records are not EHR compatible.
- Limited access to health care providers limits referrals and communication.
- DSMES/T services embedded into primary care sites share less communication concerns.
- Participants welcome opportunities to communicate via phone, email and social media.



Costs & Benefits

Billing, revenue and, value

- Service costs are difficult to cover without a high volume of services.
- Tracking cost savings from quality service delivery builds administrative support.
- DSMES/T increases health care provider's capacity to serve more patients.

- Private insurance coverage for services is difficult to discern and restrictions on billable hours impact DSMES/T participation and health outcomes.
- Many sites have financial aid systems for people unable to afford services.
- Trends in service participation are related to insurance coverage and deductibles.
- Educators responsible for service billing and coding express the need for additional training.
- Uninsured persons and those with a high insurance deductible are most at risk for inadequate diabetes education and diabetes complications
- Credentialing policies restrict ability to provide and bill services most effectively.



Cultural Responsiveness

Language, resources, and outreach

- Interpretive services and education resources are needed for the growing number of non-English speakers in Idaho.
- Spanish-speaking DSMES/T Educators are a critical and expanding need in Idaho.
- Technological-based interpretive services are less valued than face-to-face services.
- Non-English speakers with diabetes often lack insurance and face participation barriers.
- Other important cultural considerations include education level, health literacy, and rurality.
- Culturally responsive DSMES/T outreach and marketing is limited; population-based approaches are needed to raise awareness of diabetes prevention and control services.



Marketing & Outreach

Practices, barriers, and opportunities

- Few sites have the capacity to engage in robust marketing efforts.
- Marketing barriers include cost, time, staff, resources, and expertise.
- DSMES/T service marketing is not highly prioritized.
- Educators express need for health care provider outreach to increase DSMES/T referrals.
- Training on effective marketing and access to marketing materials is by DSMES/T educators desired.
- Resources and funds are needed for DSMES/T marketing.
- Regional and culturally-responsive marketing approaches are needed.
- Educators recommend a statewide DSMES/T awareness campaign.



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Accreditation & Sustainability

Benefits, challenges, and supports

- Maintaining DSMES/T accreditation is viewed as a quality measure and important for generating revenue.
- Accreditation fees are burdensome for sites serving fewer participants.
- EHR incompatibility increases documentation challenges.
- Educators serving larger sites enjoy greater support for CDE training and required on-going continuing education.
- Free and affordable DSMES/T education sources are diminishing, creating a burden on educators.



Technology-enabled education

Limitation, potential and training needs

- Educators recognize the potential for technology integration into DSMES/T services.
- Telehealth DSMES/T is practiced in select sites and has increased access and participation
- Technology limitations include EHR incompatibility, equipment, space, skill level, and payor requirements.
- Participants increasingly utilize the internet for diabetes information and desire to increase technological aptitude.
- Educators desire training on Continuous Glucose Monitors (CGM) and insulin pumps.



Networks & Support

Connections, training, and funding.

- Educators in smaller sites desire opportunities to network with other educators.
- Regional training and networking could build educator skills and reduce travel costs.
- Experienced educators are open to mentoring new educators if external funding becomes available to off-set time and travel costs.
- Grant funding is important to expand services, conduct quality improvement projects, support professional development, obtain needed resources, and enhance outreach efforts.
- Educators look to the state Diabetes program for information on emerging health system issues (e.g., care coordination, population health, telehealth, service reimbursement, etc.)

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Diabetes Self-Management and Education and Support/ Training Educator Interviews

Findings

The DSMES/T educator interviews offer rich insight into the current practices, successes, challenges, and opportunities for diabetes education and self-management services in Idaho. These findings do not attempt to summarize responses to each question asked of each educator; instead, findings identify key themes emerging from the interviews that offer insight into potential strategies and opportunities to expand the reach and benefits of DSMES/T services in Idaho. In keeping with American Diabetes Association (ADA) and American Association of Diabetes Education guidelines, DSMES/T is referred to as a service; all DSMES/T managers, coordinators and educators are referred to as educators.



DSMES/T Service Delivery

Structure, capacity, staffing

Structure

Idaho DSMES/T services vary in size, staffing, location, setting, population served, and longevity. The longest running program began services in 1995; several DSMES/T educators interviewed initiated, grew, and adapted DSMES/T services over time. Each DSMES/T site is unique and offers services tailored to best meet the needs of their population. DSMES/T services are delivered in a variety of settings: private and public clinics, county, public, and private for-profit and non-profit hospitals, and in a public health agency. Few sites offer services outside of normal business hours; some experimented with expanded hours but did not

experience appreciable success. DSMES/T educators sought accreditation with either the American Diabetes Association (ADA) or the American Association of Diabetes Educators (AADE) for various reasons; each educator expressed overall satisfaction with their chosen accrediting organization.

Larger DSMES/T services offer individual assessments and deliver diabetes education in group classes; individualized services are offered in situations where the participant has special needs (hearing loss, language barriers, cognitive issues). Educators delivering group classes state that participants enjoy and benefit from the experiences and support of other participants.

I really do like the classes because it gives an opportunity for there to be good interaction with the patients and... it's been my observation that they appreciate meeting other people who are going through the same thing. Learning a bit from each other. Exchanging ideas that way.

Some sat back and were quiet, but they really fed off of each other... they didn't feel like we were picking on them, like you really need to do this... when you're in a group, everybody is struggling with this, everybody should eat this way, that's what I try to explain. This is not a diabetic diet, there's no such thing. This is healthy eating. This is how we should all eat.

Smaller DSMES/T services relate that they often do not have enough individuals for group classes; group sessions are not well attended; furthermore, educators notice that participants prefer individual sessions.

I used to do classes and because we are a small rural community trying to get at least 4 people to come to a class at the same time was pretty much an impossible feat.

We would love to do group classes, it's a better use of our time. But we don't get good participation.

Some educators prefer the structure of individualized services versus group education and support, especially when serving older individuals, people hard of hearing, or participants with limited English language skills. Others discuss the importance of individual sessions when training participants on new devices.

A lot of our education is spent training on new devices because the technology has changed so much. Even in the last 5 years...we do a lot of insulin and continuous glucose monitoring (CGM) training.

Most sites use an ADA or AADE approved curriculum rather than creating their own. Several educators identify challenges with their adopted curriculum and the need to tailor it to the populations they serve.

Probably the pathophysiology of the Type 2 diabetes and the medications require the most tweaking. I think sometimes they oversimplify it...trying to get it down to an 8th grade level.

Most of the time I think we can get our patients to understand without having to 'dummy' it down.

Capacity

Our doctors know we're here, I would say they're our best advocate.

The number of DSMES/T participants receiving services ranged from 60-5,000 per year and correlated most closely with the size of the population served. In general, smaller DSMES/T sites state they had the capacity to serve more participants, whereas the largest DSMES/T providers maintain waiting lists of a few weeks to a maximum of six weeks. DSMES/T service capacity appears linked to four factors: 1) referrals from health care providers, 2) ability to pay for services, 3) integration of DSMES/T services in medical practice settings (both stand-alone clinics and in hospital-based settings), and 4) adequate DSMES/T staffing and space. Issues of service costs are addressed separately.

We could use more patients, I wish more were referred to us

Referrals from health care providers is decidedly the number one factor influencing the number of participants receiving DSMES/T services. Sites that describe their services as under-subscribed tend to be located in rural areas, disconnected from a health care provider practice. Many sites have a limited ability to provide services for non-English speakers.

A lot of the doctors just give them meds and they don't send them. If all of the people really came and got education, it would be a profitable business. But we don't have enough people.

We could really grow. Reach people we aren't reaching. Helping providers understand what our program really is, marketing for both participants and providers.

I think one downfall is trying to connect with the Hispanic culture because I do not speak Spanish.

Educators discuss the importance of building rapport and relationships with health care providers to bring in and retain DSMES/T participants. Both rural and urban educators state that high health care provider turnover and limited time dedicated to outreach negatively impacts DSMES/T referrals.

I think our rapport with our physicians really helps to retain clients because our physicians support what we do because they find that what we do is an important service.

We have a couple of new physicians...I think we could probably increase our clientele by going by and telling them what we do and where we do it. They're new, that's something I need to take care of.

Programs that are at or over capacity enjoy health care provider support and report positive participant outcomes.

There's definitely been a time when the need and physician referrals, was not there, and I would have said physician referrals were the biggest barrier, but in the last 5 years, I'd say that's not the case. They really love having us.

We move the dial pretty quick. Patients who are going to a physical go every 3-4 months and they make a tweak here and there, but we tweak insulin pretty quickly, so patients see progress and that's real motivating.

Educators offer practical solutions to increase the number of participants receiving DSMES/T services.

One thing I wish is that the physicians, as soon as these patients are diagnosed with an A1c of 6.5%, I wish they would give us a referral for them. ADA has an algorithm of care that primary care is supposed to follow. I don't think it's always being done.

Educators cite that participants' time and the cost of DSMES/T services limit capacity. Additionally, educators remark that the limited time after the first year when DSMES/T services are covered by Medicare and other insurances impacts both the number and the health outcomes of the participants served.

I think timewise, people find it difficult to dedicate 10 hours within a year...it sounds like a lot of time. And a group class is costly for people. Those are the two biggest factors, time away from work and cost.

We do pretty well with 10 hours the first year, it would be nice to have more than 4 hours the second year, especially if you are trying to work with people that are starting on insulin or adjusting their insulin. Those four hours go really fast.

Larger DSMES/T sites dedicate staff to conduct scheduling and participant follow-ups; smaller services experience greater difficulty with client follow-up due to time constraints and issues with scheduling.

We have a unit secretary who does our scheduling for us, all he does is schedule patients. It's been a treat to have someone help us with that. You don't realize the time it takes to do that.

We have a limitation that our scheduler has other duties too, so she's not always at her phone. I wish I had a better way to schedule.

Sites serving large numbers of participants express that staff and available space limit their capacity to grow their services. Educators tie increased capacity to the ability to offer more education in a group format.

We have no classrooms in this clinic. We use classrooms across the street and sometimes they are booked, and we book a year ahead of time to have space. [We need] a centrally located facility with a large enough classroom that other programs in the area [could] use. I got a grant and turned a space into a classroom.

Expansion of services into smaller communities increases DSMES/T service capacity and brings needed services to vulnerable populations.

I think location makes a big difference. When we first opened, people from other nearby cities with a large population of people with diabetes would not travel.

Other educators identify that expanding services to additional community settings results in additional accreditation fees, posing a financial barrier for DSMES/T sites to expand services to areas of need.

I would love to [serve] the Hispanic population. I would love to pick a couple of Catholic churches and go to one this month and then here another month. Every time your locations change you have 30 days to update it with your accreditation agency. It's...\$100 per location.

In discussing capacity, educators highlight the time required to conduct DSMES/T services and complete charting and required documentation. Some educators voice concern that their services may be undervalued or not well understood by their organization's administrators and decision-makers.

I sometimes have 4-5 patients a day and that doesn't seem like very many people since doctors do 15-minute appointments, but most of my patients take about an hour or an hour and half.

Educators in rural areas working together as one approach to grow DSMES/T capacity.

I think there are opportunities to work with other groups to achieve accreditation or partnering together to run one program in multiple locations. Because of the administrative burden of these programs, I think this a great option for rural Idaho.

Staffing

Service staff are primarily registered dietitian nutritionists (RDNs) and registered nurses (RNs); a few sites have additional team members including pharmacists, community health workers, and behavioral health specialists. All sites have Certified Diabetes Educator (CDE) staff; most non-certified staff work towards obtaining certification. Larger sites emphasize that, "It's been a long time that I've had to hire a non-CDE," and that due to the volume of people with diabetes served, they are able to "grow their own" CDEs. Sites in rural areas articulate the greatest difficulty in recruiting qualified staff, especially RDNs with a CDE; qualified staff are important as some insurances require CDE for reimbursement (Medicaid, Tricare).

I posted a dietitian job for five years and I said CDE preferred and I didn't get anybody to apply.

The last gal we hired was just an RD but [organization] hired her knowing that she'd eventually get her education hours in and pass the CDE test. CDE's are hard to find.

DSMES/T services are commonly managed by RDNs. One benefit of staffing DSMES/T services with RDNs is their ability to bill insurances for Medical Nutrition Therapy (MNT); this increases the amount of time available for diabetes nutrition counseling. RDNs in rural hospital settings state that it is difficult to meet the required number of diabetes patient hours to meet CDE requirements.

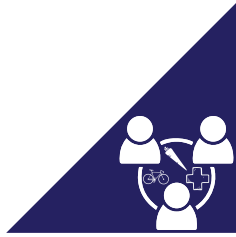
It's kind of a catch 22, they want you to be a CDE, but then you can't get enough patient education hours and it needs to be true education hours, it can't be reading or doing anything else, it actually needs to be patient interaction to become a CDE.

Staffing limitations cause challenges in expanding service delivery, this trend is especially noted among sites with part-time educators.

Because both of our dietitians work part-time, sometimes there is a bit of a waitlist to get in for the diet part. I feel like we have the capacity to grow. Staffing is a bigger factor than space.

Several educators identify their services as 'team-based care' and discuss the value of aligning themselves as members of a health team to support people with diabetes, "This is another member of the team and they are as a valuable to the patient as the provider is."

It's wonderful to work alongside of a pharmacist and learn from a pharmacist. To see how they talk to a patient about a medication. I think that has broadened my understanding. My ability to practice because I have that sort of teamwork.



Education and Support

Participants, Educators, and Health Care Providers

Most of them want to be here and want to learn. We see a lot of success.

All sites accept private (commercial) and public insurance for diabetes education and support. Due to the majority of participants utilizing Medicare, most sites build their required curriculum around Medicare requirements and reimbursement. Educators state that private insurances often follow Medicare requirements when they determine education and support reimbursements.

We work really hard at making sure that whatever education we are giving is up to date.

Participants

Overall, the majority of educators are positive about the patient-centered DSMES/T services they provide and report positive participant outcomes. A common remark identified was advances in diabetes management and the focus on motivational interviewing, versus didactic instruction, as having improved DSMES/T service satisfaction for participants and staff.

When you start you think you have to teach them [patients] it all, and you don't. I tell my staff, you don't have to get through this list-they don't even know about this list. You do have to get through their list.

Educators report that participants often approach DSMES/T services with reluctance and convey pleasant surprise when they experience tailored education and support for diabetes self-management.

I think most people who come in are happy they came and that it's been totally worth their time. Some people have come in...kind of begrudgingly, because their doctor or their spouse wanted them to, but usually they leave feeling better about diabetes than they did before and realize it's not as hard as they thought it would be.

I had a gentleman who said his doctor told him to see a diabetes educator for 20 years. He said, 'For 20 years I've been dreading this, but it's not bad.'

I had a woman named [name], she had an A1c of 14...she comes in and says, 'I'll be your best student.' She got her A1c down below 6, on Metformin only, which is amazing. And she comes to every support group and now she doesn't take her Metformin anymore.

Many educators state that participants would benefit more from DSMES/T if referred earlier.

[If] doctors would understand the importance of diabetes education. If they referred earlier on, we could prevent a lot of the problems that come. They refer the ones that have all the complications and the problems, whereas if they referred right when they were diagnosed, we could get working on that.

I think I get most of them [referrals] when their A1c is really high...if their A1c is like 7...they might be diagnosed with diabetes, but the doctor is trying to manage it with Metformin and they don't really refer to education at that point.

Co-morbidities add to the challenges that participants face when seeking DSMES/T services.

We get people who already have comorbidities. They've already had a heart attack, they've already had a stroke, they've already had open heart surgery...so that can make it hard for them to sit through a two-hour class if they have other appointments they have to go to. That's a lot to manage all the time.

Individuals' level of difficulty in obtaining DSMES/T services varies. Educators share that people with lower incomes and mental health issues face additional stressors that make it harder to self-manage their diabetes. Transportation is also an important barrier to care. One educator recalls a participant telling her, "I just have food bank food. How am I going to eat healthy with food bank food?"

How do you tell somebody with a family of five that is getting beans, pasta, white bread and food bank commodities that you should be eating this and that? It's not a possibility.

I feel like our low-income participants have more stressors outside of their diabetes which makes it hard to self-manage their diabetes. You know, if you're worried about affording your insulin, or where you're going to get your next meal, it doesn't make diabetes education nearly as easy.

To see more participants and generate greater revenue, several educators state that they have to reduce the time allotted for education; educators express concerns that participants receive less instruction than needed.

We've cut our visit lengths, we used to have the luxury of a 90-minute visit for our initial visit with every patient. For non-insulin[patients] we're down to 75 minutes and 15 minutes is required documenting...that leaves you with one hour to work with a patient.

DSMES/T Educators

The majority of DSMES/T educators express confidence in their ability to provide services; many educators have at least 10-15 years of experience. Educators in larger DSMES/T service settings have the greatest access to and support for becoming CDEs, including continuing education and professional development. Educators in smaller sites report much less support for professional development opportunities outside of free webinars.

In the job description it does say within two years they will obtain CDE by having face-to-face hours and making sure they are getting 15 hours of continuing education a year.

It's difficult for me to get out of here, the last time I did it [continuing education hours] almost all on-line in one-hour increments, to get the whole 75 hours.

We don't get a lot of opportunity in this area. I have to travel out, which costs me money... We have a small organization so there's a lot of people here that need continuing education too.

DSMES/T education desires vary among educators and relate to the educators' skill set, interest, time, and specific agency support for continued education. Several educators describe serving increasing numbers of participants with mental health issues; this results in a desire to gain skills to better serve individuals with a range of psychosocial health issues. A few sites have the option to refer participants for behavioral health services. Furthermore, addressing physical activity for a wide range of abilities is a concern for some educators. DSMES/T sites appear to have limited access to physical activity specialists. Training needs relate to the educator's level of experience and training.

You have the bad knees, or the 350-pound person or the one who wants to go jogging every day. There's a wide spectrum of clients.

The needs of our clinic are different than need of other educators in the state. Sometimes

we find the local things, although are good programs, but we are already passed that. If we had some higher-level programs for people who have been in it for a while, or at the higher end of the skill set, we would love those programs.

DSMES/T educators use educational resources they create and purchase. Educators also utilize free resources, primarily from pharmaceutical companies, to save costs, “When I can get ahold of free stuff, that is what I go for because I try to keep my costs down.”

Educators spoke favorably of educational resources supplied by the Department (pocket guides, carbohydrate counting cards, etc.) in the past. Many purchase favorite items (the ADA placemat, food models, etc.); other educators express their desire to purchase materials but do not have the funds; restriction of pharmaceutical-branded materials varies between DSMES/T sites.

Educators seek health resources for participants that are:

- Visually attractive and practical
- Free or very affordable
- Written with lower health literacy and numeracy in mind
- Culturally and linguistically appropriate; resources demonstrate a high need for Spanish-language options
- Designed with images and photographs of people resembling the population served

Health Care Providers

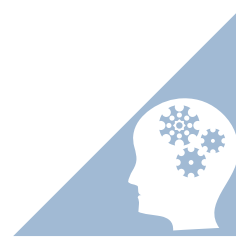
Educators relate referrals for DSMES/T services to health care providers’ knowledge and understanding of DSMES/T. Educators believe that health care providers would benefit from education on the benefits of DSMES/T services and team-based care, new diabetes clinical practice guidelines, and insurance coverage of, and coding for, DSMES/T services.

I find that when new providers come in and just haven’t worked in this system that is as integrated as we are, they struggle with aspects

of team-based care. But in time, once they start to see the progress that the patient makes with DMSE, we get good buy in.

Educators offer suggestions for educating health care providers on the benefits of DSMES/T.

I meet with providers every single day to say, ‘What do you have today that I can help you with? Who are you seeing? What are you thinking you’re going to do with this person and how can I support them?’



Knowledge, Attitudes, and Beliefs Implications for DSMES/T Services

Sometimes people don’t know diabetes education exists.

A majority of educators agree that general knowledge about diabetes and the awareness of DSMES/T services is lacking. Educators further identify that diabetes education and treatment has changed dramatically; current negative perceptions about DSMES/T often reflect outdated practices.

We try to dispel the shame that they may feel.

How we treat Type 2 diabetes has really changed and we try to explain the pathophysiology and the hormonal imbalances that are going on and yes, they do have control over a lot of their diabetes, but there are somethings that are occurring in their bodies that are out of their control.

When health care providers are knowledgeable and supportive of DSMES/T, referrals increase. Many educators voice concern that health care providers are often unaware of the potential benefits of DSMES/T services; lack of provider knowledge may unknowingly contribute to misunderstandings about diabetes management.

I think there are so many ideas out there on the internet or even from doctors, sometimes... no potatoes, no rice, no sweets, all of these no's and never's, and they just get overwhelmed and think I'm going to eat cardboard the rest of my life, or I'm just going to die happy and not care. But you never die happy from diabetes.

One patient was told by his doctor, 'If it tastes good, spit it out.' I had to work with him for 6 months before he finally started understanding what I was doing and how I was doing it... Sometimes I think it's the perspective of the provider that is our barrier.

Educators relay misconceptions they believe participants have about diabetes management and the confusion participants experience when they receive incompatible information from the media, health care providers, and DSMES/T educators.

Everybody hears about the complications and not everybody talks about they are preventable. There's not enough information that this is preventable.

Fear, discouragement, fatalism, and shame are perceived barriers to seeking DSMES/T services.

Do they really want to face it? It's easier if you don't come. They are not ready to leave the denial stage.

Well, with the Hispanic communities, what I see quite a bit, there is no understanding if I can control it. They have it and it's their death sentence. And so, if there not feeling bad, they're in denial.

Educators perceive that beliefs about diabetes and medication may impact willingness to participate in DSMES/T services.

A lot of cultures have the belief that this is God's will, I can't do anything about it. Some people go by family experiences where they feel like insulin might be the cause of the complications...insulin was started too late, so there were complications after going on insulin, but it was not the cause.

Educators offer thoughtful approaches to helping participants feel more comfortable accepting and receiving DSMES/T services.

We try and recognize very early on and ask about barriers. How do you feel about this? We try to dispel the shame they may feel... dispel the stigma around them and get them comfortable with what we're doing. There's been a lot of changes around the language that we use in diabetes education. They aren't diabetics - they are people with diabetes. If we do that across the board, from everyone at the front desk to the nurse...the provider...it gets them more comfortable.

Other educators describe health-related social determinants, like food insecurity, which impact DSMES/T participation.

I think sometimes the perception that their insurance doesn't cover the service might be a barrier that prevents them from coming for services.

Patients can't afford the medications they need or have food to eat, they don't care about being educated for their diabetes and they likely can't afford that either, even the car ride to the clinic.

It's hard to keep them bought in when you're telling them something that feels like it is impossible. There's a lot of shame around food insecurity and I think it's embarrassing to talk about.



Communication

Referrals, follow-up, and documentation

Once I'm dealing with a doctor and then they know me and then I can increase the referrals.

The DSMES/T sites which identify the least concerns associated with communication and referrals are either the largest hospital-based sites or sites embedded in a health care practice (primary care or endocrinology).

Diabetes education belongs in primary care! This provides a seamless transition for patients and far improved communication between provider and educator...the patient is able to see us as part of the medical care process. Likewise, providers regularly see and work with educators and we are part of their team. They don't have to 'think' about whether to send someone to diabetes education, it's just what we do.

I think you have the most impact when you go in the room with the provider. That seems to get good patient buy in. It's a lot easier to have that time with the patient than making separate appointments.

Communication is a bit of a barrier for us, it takes time.

DSMES/T sites with compatible EHRs are better able to communicate with health care providers, make and receive DSMES/T referrals, document services, and follow-up on participant health outcomes.

Our referral system is kind of a double-sided mirror, we can track how many times the referral center has called the patient, whether they have declined, or were not able to reach them. But we always like to communicate back to the provider. There's nothing worse for a provider than going, 'What happened?' 'Where did they [patient] go?'

The biggest advocate is the provider, saying, 'You really need to come,' and when they don't come for their first visit, we do reach out to the provider to let them know. We call the patient...to try to reschedule them, but we also call the provider and say, 'You know, your patient did not show for their first visit.'

Sites without compatible EHRs have greater difficulty communicating with health care providers, receiving referrals, obtaining needed medical information, sharing outcomes, and reporting to accreditation bodies. Some sites rely on paper charts, faxed referrals and medical notes.

I feel like faxes are old school and we have run into some referrals slipping through the cracks.

Innovative and successful referral strategies increase DSMES/T participation numbers. Referral forms developed by DSMES/T sites reduce the burden on health care providers, establish protocols that trigger DSMES/T referrals for newly diagnosed persons with diabetes, and assist in the adoption of EHR compatible tracking and follow-up forms.

We have been working on a different referral form, so they [physicians] can check boxes without a lot of work that creates an automatic referral.

We send 'diabetes self-management education orders' to the doctor.... The educator actually dictates what the education is going to be and the doctor signs off. The doctors don't really want to fill things out, they don't want to take the time and they don't now. We're supposed to be the professionals that are helping them.

Educators often create templates to meet DSMES/T accreditation reporting guidelines. They report that compiling the required information is time consuming; educators voice reduced confidence that health care providers will notice and read the notes they write.

We have just switched over to Epic, so I'm working on trying to figure out how to pull reports to submit data to ADA. As of right now, it's all hand done in Excel.

For meaningful use for rural hospitals, you have to chart everything in the medical record, whether or not the medical record meets your needs or not. It is very inefficient. It is a capacity issue because we could see more patients if it wasn't so cumbersome to chart.

Most educators reach out to potential DSMES/T participants via the phone. Some educators indicate that they are unable to meet their participants' desires to receive appointment reminders via text or social media.

As DSMES/T participants increasingly have access to smart phones and social media, educators express an interest in expanding their modes of communication with participants and health care providers; currently, many do not have this ability at their place of work. In contrast, larger sites use electronic communication portals, e.g., MyChart, which assists participants in sending and receiving messages to DSMES/T staff and providers.



Costs and Benefits

Billing, revenue, and value

I have a payer right now that will not cover diabetes education at this clinic

Most educators express concern about costs associated with DSMES/T services. Second to lack of referrals, cost of services is the most frequently cited barrier to DSMES/T participation. The uninsured and individuals with high insurance deductibles are those least likely to receive services, often face barriers getting time off from work, and are the most likely to present complications from diabetes.

Medications have become more costly, so do you have them come to class or buy their medications? More people are uninsured and finding those resources can be challenging.

I feel there are a lot of resources for people who can afford it. It's the people who can't afford it- that is the problem. Those are the ones that are really late in the diabetes process and are difficult to control - the ones that need the most support.

Also, if you consider the most financially vulnerable population, many of them do not have schedules to allow them to coming in during normal waking hours. Many work swing shift, further complicating scheduling [for DSMES/T services].

Educators spend considerable time resolving billing issues for DSMES/T and MNT by insurance type; educators describe this as a barrier to care for participants and a source of professional frustration.

I think the big thing is to make sure that the nutrition ones [services] use the preventive code on the referral, or get the doctor to do it, because when it's a preventive benefit, you have no copay or deductible. We usually bill the first two visits as nutrition.

Medicaid doesn't cover MNT...Medicare has MNT and DSME, you have no clue what private insurers have...so it's kind of a Russian Roulette if you bill for MNT.

There are many people who would benefit from diabetes education, but they are self-pay, they are not willing to pay for education.

Most sites offer some kind of financial support for individuals who are unable to afford DSMES/T services. Payment within 30 days is rewarded with a discount (20-40%) at some sites. Other DSMES/T sites are housed in organizations that offer scholarships, vouchers, or other financial support. An instance of diverse financial support is demonstrated in one site's agreement to offer free services for one person each month. Despite these examples of financial support, educators agree that cost is a barrier and applying for assistance presents further difficulties.

One thing our facility offers is that if a person wants to pay up front they get a 40% discount. Many people do that. That has been beneficial.

One of the things that is working really well is the voucher program. They [patients] see a doctor at [clinic name], if they meet income requirements, they get a voucher for MNT. That is a motivator for them to see a diabetes educator; they feel it's a good opportunity to see our staff.

I wish education was free. Education is not much of a money maker. Its more for preventing the expenses down the road.

Some educators suggest that offering free DSMES/T services for participants who are unable to pay may be a solution to improve health outcomes and reduce overall health care costs. Current Medicare policies do not allow sites to offer free DSMES/T services.

If we want to bill Medicare we cannot provide a service for free and then bill Medicare. So, our hands are pretty tied, in terms of giving out free education.

Educators state that they need additional billable hours after the first year when participants change medications, begin insulin, and receive instruction on medical devices (e.g., insulin pumps), particularly if participants have neglected diabetes self-management for several years. Medicare limitations for individual vs group education and the impact of this policy on revenue concerns DSMES/T educators.

I think Medicare is doing a disservice requiring it [DSMES/T] to be in a group. You can see them individually, but you can only charge a group rate. That patient population, they need individual education.

Except for a few large service sites, educators describe the difficulty in representing the true value of rendered services. Preventing costly diabetes complications in the future is an 'invisible value;' in an era of health cost cutting measures, educators worry about the sustainability of their services.

If all of the people really came and got education, it would be a profitable business. But we don't have enough people.

Educators engaged with value-based care systems relate that their services are valued and supported. Some use patient outcomes to demonstrate the value of their services.

We think this is critical to our patient care and that's the level of care we're going to provide. It's moving away from fee-for-service to a more value-based system. We know that we have to manage these patients really well and DSME is a piece of it.

We track our outcomes and use them as marketing to the payers. For example, our average A1c percentage drop for people who have completed the program is 2.2%.

In addition to health cost savings, educators relate that DSMES/T benefits the clinics and hospitals they serve as it frees up time physicians traditionally allocate to educate people with diabetes during routine office visits. This practice allows physicians additional time to see more patients.

But where it comes to cost savings, that's always hard to prove. I work closely with the quality team that gathers metrics. What would happen if we disappeared and the primary care physicians (PCP) were having to do all this work? It's going to go back on the PCP... they're already overworked and having to see a patient every 15 minutes, 20-25 patients a day.

There is value in DSMES/T services aligning with the local Community Health Assessment.

Our Community Wellness and Needs Assessment always has diabetes and weight loss on it. So, they have to have it and meet it, so that makes us important.

Educators express frustration and confusion related to determining commercial insurance coverage for services and restrictions on billable hours and services. Policies that restrict billing for MNT and DSMES/T on the same day inconvenience participants by requiring them to return a second day for additional services.

Our biggest challenge is getting an idea of what will be paid for. For a Medicare patient, we need to understand where they are in their benefits for their initial and subsequent years. Patients always ask how much this is going to cost?

And the insurance game is probably the most frustrating thing working this job. There're so many different insurances, some will cover some things, some won't cover others.

Educators share concerns that the burden to determine insurance eligibility largely falls on the client who may have limited access and/or internet skills to track their insurance eligibility. This burden impacts DSMES/T participation.

We have a person to check Medicare benefits, but for Medicare Advantage and private insurances, there's no way we have the bandwidth to check their benefits, it's up to the patient to find out.

I would say knowing benefits is another barrier because I'm sure if we were able to tell everybody, what their benefits are for sure, they wouldn't be hesitant at all to come in.

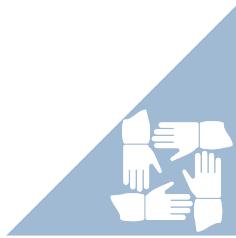
DSMES/T financial management varies between sites; those embedded in larger institutions have staff dedicated to financial management oversight and billing; in these sites, coding and reconciling expenditures and revenues is possible. Some smaller sites are less engaged and knowledgeable about the financial aspects associated with DSMES/T billing than others.

I don't participate in any of that [billing] anymore. Someone submits the charges, and then the billing office does the rest. I can see what comes out on my budget. It looks okay, but again, I don't know all the actual numbers, or [claim] denials and all of that.

Defending the value of DSMES/T services is of paramount importance to some educators. One DSMES/T manager based in a large hospital setting shared their process of quantifying the cost savings of DSMES/T to build administrative support; conducting return on investment studies requires appropriate staff (administrators, QI staff, statisticians, etc.) and funding.

They [grant agency] gave us \$100,000 every year for three years with the goal of having people not use the ER and have them use outpatient clinics...in a nut shell...I set up a system with the data team. What we found is that a lot of patients go to the ER when they can't afford their insulin. In that three years we redirected close to 500 people from the ER to using us [DSMES/T services]. When you look at the average cost of admission of ER visits...it was over \$3 million we saved them over three years.

Finally, educators express an interest in DSMES/T financial management for themselves and staff involved with coding, billing, and other financial tasks.



Cultural Responsiveness

Language, resources, and outreach

I think there's a comfort level when you have somebody from the same culture.

Educators approach the question of culturally responsive DSMES/T services in diverse ways. In predominantly English-speaking areas, the primary cultural concern is for diabetes education resources at appropriate reading levels which contain images that reflect the population demographics.

It's great that we offer training in multicultural and multilingual DSMES/T services, but not everyone in the state experiences that. We deal with a different set of cultural differences.

There is strong support for more culturally responsive DSMES/T services in areas that serve a greater percentage of non-English speakers, particularly Spanish- dominant participants. Lack of face-to-face Spanish interpretation and Latinx DSMES/T educators is a critical and expanding need in Idaho. Many educators discuss either the lack, or inadequacy, of the interpretive services currently available.

I wish I spoke Spanish. We have a lot of Hispanic, non-English speaking people with diabetes.

Right now, we have two referrals of Spanish speaking patients and we're having a hard time getting ahold of them because we have to ask another employee to help us. Which is frustrating... There's a need for it. We have a lot of Hispanic, non-English speakers that have diabetes.

I hear from some people that do come in, 'My doctor told me I couldn't have any more tortillas...and that's very discouraging.' When they hear that from providers, and then hear they need to see an educator, they're not going to come, and if they do, they come with a lot of hesitation.

Educators share the importance of establishing trust among participants and health care providers.

If there is trust in their provider, they will believe anything the provider tells them. If there's not trust, if they aren't comfortable with their provider, then it's denial...I've had a lot of people that won't take the medication their provider has given them because they feel like it's going to harm them. And they ask

me, please don't tell my provider...they'll yell at me. That tells me...that they're not trusting their provider.

Idaho is increasingly diverse, and many educators lack educational resources in different languages.

We have had quite a few Middle Eastern people. Arabic not a real common language, but those are a bit difficult to find. Where do you find that handout?

We have a large refugee population here. We are one of the largest refugee placement centers in the United States. A lot of these individuals get jobs by becoming medical interpreters. Anything from Swahili to Arabic to Uzbek.

We have good material in English but having it translated into Spanish is sometimes hit or miss. So just having the plate method and handouts that are in Spanish would be really good for us.

DSMES/T sites strive to gain cultural understanding, and the majority attempt to employ diverse health staff and educate themselves to better understand important cultural beliefs and practices.

When they say they are eating fu fu for breakfast, what in the world is fu fu? They say they're eating 12 eggs and then you find out they're quail eggs. It's just a matter of experience and my educator is good at going to the markets, buying things, trying things, researching them...

Other factors that negatively impacted minorities' DSMES/T access include limited awareness about the effectiveness of diabetes education, the limited number of bilingual and bicultural diabetes educators, lack of insurance, high commercial insurance deductibles, and the limited ability for employed individuals to seek and complete DSMES/T services.

Nobody talks about diabetes. And if they're talking about it, it's very negative. It's somebody has died from taking this medication and so then there's a lot of denial going on.

We have a lot of seasonal laborers in this area and in the summer; they cannot take time off work, even to come in for a provider visit, their hours are terrible, and they are commuting.

You just can't get them in and a lot are working on weekends too, so there's just not an option.

Last, culturally-responsive DSMES/T outreach and marketing is limited, and educators cite a need for targeted, population-based approaches to raise DSMES/T awareness.



Marketing and Outreach

Practices, barriers, and opportunities

Marketing requires me to be out of the office to knock on doors, that takes an enormous amount of time.

Overall, marketing and outreach of DSMES/T is limited to special events (health fairs, community presentations) and national health observances (National Nutrition Month, Diabetes Awareness Month). Most educators agree more outreach is needed to raise DSMES/T awareness and educate potential populations about diabetes.

How many people in Idaho have diabetes? Are the trends and stats published? Do the people of Idaho know? And with our geographic area, we have so much to offer. I think those are things we need to play off of.

That's an area where we really need to work. When you have face to face interactions with providers, you're going to be more likely to get referrals. If they don't have a positive attitude about diabetes education, they're not seeking you out to make referrals.

Few sites actively engage in marketing and outreach of DSMES/T services outside of occasional health fairs and community presentations. Educators identify various reasons including lack of time, marketing resources, difficulty connecting with busy health care providers, and lack of confidence and skills. Most educators believe that increased outreach and marketing to both health care providers and to people with diabetes may increase referrals, client participation, and successful DSMES/T outcomes.

We don't have any budget for outreach.

I feel like outreach takes a lot of time and so we don't do as much outreach as we should. And it's just, the last few events that we participated in, we did not run them at all, had such poor turn out, I felt like it wasn't worth our time to be there.

We have someone who is over marketing at the hospital and we've been meeting with them on a monthly basis, coming up with a plan. We are doing an overhaul on our brochures and changing some signage out front. We do have a phone app...each month the dietitian might have a few lines.

Educators relay that meeting with health care providers (physicians) is difficult due to their time constraints.

We've gone to visit the doctor's office several times. We rarely speak to the providers. They usually have us speak to the nurses. Everyone once in a while, there might be a physician assistant (PA) we get to talk to, and if you're lucky, a doctor. They're very protected by their personnel. They are so busy.

To improve outreach and marketing efforts, educators cite a need for marketing training, additional resources to develop and print materials, and the ability to purchase paid media (radio, newspaper, etc.) to rationalize the time spent not interacting with current participants.

We always talk about it here, we would love to do outreach. I don't even know how to get started. Part of it is...there's only three of us, it's another project to tackle. I would love to do thorough outreach...where I'm doing shared medical appointments with the provider.

Educators identify additional themes including the need for culturally-responsive and regional marketing approaches, as well as the desire for a statewide DSMES/T awareness campaign to reach people with diabetes and various health care professionals (dentists, podiatrists, pharmacists, optometrists, etc.).

If patients have seen something on TV, they'll come in and say, 'I saw an ad for [a drug, an insulin pump, etc.], would that work for me?' There's lots of ads on TV about diabetes. I think that messaging needs to come from the state to the patients [about DSMES/T].



Accreditation & Sustainability

Benefits, challenges, and supports

Diabetes is very dynamic, and things change.

Interviewed educators are unanimous in their support for maintaining their accredited DSMES/T service both because recognition is viewed as an important quality measure, and accreditation allows them to bill for services. When asked what might prevent the establishment or continuation of DSMES/T services, educators share that the key factors for success are strong commitment, support, and dedication.

You have to have somebody who believes in it [DSMES/T] and feels there is a strong purpose in providing diabetes education in your community. I think it takes time to pull it together, it doesn't happen overnight.

Educators discuss the up-front and maintenance costs of DSMES/T accreditation and the barriers that it imposes on sites.

You need to see patients before you get accredited. So, when you're seeing patients because you're trying to get accredited, you're not getting reimbursed, you're not getting anything.

You need to make sure you're doing quality improvement and the biggest thing is, if you do not have the resources to get a curriculum that's already been approved through ADA, then you have to get all of that approved on your own.

Lack of money for study materials and testing fee for CDE might be a barrier to receiving accreditation.

Finding a doctor that's willing to come to the advisory group is hard. They're busy.

DSMES/T accreditation and service sustainability concerns are correlated with program size. Larger sites often have full time staff to manage accreditation, freeing educators to deliver services. Educators agree that achieving and maintaining ADA or AADE accreditation is a challenge and costly; however, accreditation is worthwhile due to the quality of care that is obtained in the process.

The cost is \$1200 every four years. For us, we are a big-volume program, it's not a big deal, but it might be for a little rural hospital-based program. There is also a significant amount of work to track everything. The computer program we paid for helps, it's a benefit when you see 550 patients a year. But if you're seeing 50, they might be tracking things by hand.

It's expensive, the initial part and then you also have to pay \$1400 every four years. I hope they [hospital administration] continue to support us. I've heard other hospitals have taken diabetes education away; I don't want that to happen to us.

Smaller DSMES/T sites find meeting accreditation standards, documentation requirements, and fees more burdensome than larger sites. The effort required to meet documentation requirements takes time away from serving participants.

There's just a lot of rules you have to follow... your curriculum has to be approved, you have to have twice a year meeting, you have to have a doctor there, which is sometimes hard to get, and community members that have diabetes for the advisory committee. It's just hard.

As a sole educator for 4 years, it's difficult. They want me to grow the program, but there is only so much time.

Educators consider new diabetes education approaches that are needed to address societal shifts and challenges.

I think the diabetes education world really needs to understand the changing dynamics of our society. We try to fit the guidelines, but... patients don't want to sit through 10 hours of education like they may have in the past. Sometimes we get 15 minutes while they are waiting for their provider, or 10 minutes on the phone to reinforce one concept.

Flexible education that focuses on what the patient wants and needs right now is how we need to educate in the future. When patients aren't given this flexibility to meet their needs, they will drop out and often their control will reflect it.

To sustain and expand services, educators identify the need for a state chapter of the ADA and the AADE to support needed policy changes. Understanding that the Department can not engage in lobbying efforts, educators look to the state for updates about issues related to diabetes policies and insurance payment and for their continued support for the Diabetes Alliance of Idaho (DAI). Many educators express confusion about the present status of the DAI.

I think lobbying [is important]. Our national organizations are big with lobbying to expand benefits, to change some of Medicare's stupid rules, the cost of insulin, that kind of thing. We don't have an affiliate [AAEA] anymore...ours is in Seattle or Portland.

The DAI, is that still a thing? I thought the state walked away from that.



Technology enabled education

Limitations, potential, and training needs

Tech is huge and we have to keep running to keep up with that.

Educators recognize the potential for technology integration into DSMES/T services for educating and supporting participants, communicating with health care providers, and managing the program.

We don't have a phone we can text from. The way people are, if you text you might get a response. People don't listen to phone messages, they text.

Staying up to date on technology requires time and resources for professional development.

The realm of diabetes management is changing and there are new companies and gadgets, CGM and pumps. Sometimes I get lost in the technology. Staying up to date on technology is important.

The one thing that's really tough is technology. If we don't keep up, we're not going to get the kids or their parents. They want to know, 'What app should I pick?' That's a training need. You don't have time to keep up with that, but you have to.

One of our clinics wanted somebody who is pump and CGM trained; it's just not something I have. I want to be able to meet the needs of our clinics and that is what they are looking into.

Telehealth/telemedicine DSMES/T is starting in a few sites and several educators are eager to incorporate it into their practice. Technology limitations include EHR incompatibility, equipment, space, skill level, physician support, and payor requirements.

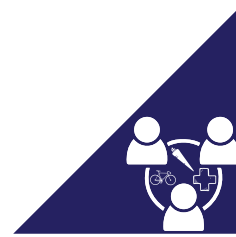
We're adding telehealth because I don't have staff big enough and if you do it through telehealth, you get reimbursed. We'll do both [individual and group] while we teach a class in [name of town], there's no reason why someone somewhere else couldn't sit in. It just takes a camera. I would love to do telemedicine with an endocrinologist, but the ones I've approached aren't interested because they are already too busy with their practices. It's a real conundrum.

There's a potential to do telehealth, but the limitations are the cost. We are also unsure about the quality and there needs to some changes in the requirements, especially for Medicare to be able to provide telehealth.

Educators lament that technology is not equitably available for all; educators emphasize the lack of equitable access to insulin pumps and CGM. One hospital received free glucose meters but could not distribute them because they were commercially branded; in this circumstance, the hospital code of ethics opposed the distribution of branded glucose meters.

They said, 'Give them a coupon' [instead of the meter. That's great, but you can't demonstrate on a coupon, you can't have them practice on a coupon.

We have beautiful technology out there, but only the few, the minority [those able to pay] can take advantage of that.



Networks & Support

Connections, training, and funding.

There is a disconnect between what's going on there in Boise and what's going on in our bubble here.

Overall, educators in the largest hospital-based sites have opportunities to network and learn from other educators. Educators in smaller sites, especially those DSMES/S in rural areas, express feelings of isolation, “I feel like I am on an island,” and a desire to learn from other educators and medical professionals in specialized diabetes care centers, like St. Luke’s Humphreys Diabetes Center.

All educators seek training and continuing education. Most desire practical training to take back to their practice; for example educators working with medical devices are interested in advanced training. Trainings centered in Boise are alienating to those who do not have the time and resources to travel.

I feel it would be beneficial to do different things: CQIs, behavioral health goals, how do you encourage or motivate your patients. Things that will help us improve our programs.

If they would sponsor a training from ADA or AADE, bringing something like that to Idaho periodically would probably help everyone... the standards change.

We'd like support for continuing education for providers and nurses. We'd like to put on a training for our providers locally so they don't have to travel into Boise.

There's not enough information that this is preventable.

Educators express their interest in collaborating and learning from one another and propose the development of regional networks to build familiarity between educators and reduce the travel costs of attending trainings and meetings in Boise. There was little mention of the Diabetes Alliance of Idaho (DAI) and some educators wonder if the DAI is still active.

I do feel like in the state of Idaho we lack that [connection]. The support is limited. We don't have a networking system where I could call another county and ask questions about DSMES. I have visited with other DSMES Coordinators and they are awesome, but I don't want to burn them out. I know they aren't my only resource, but I don't know what my other resources are.

How do we connect with other diabetes education programs? How do we get together? Maybe it could be a yearly opportunity. Connect and do a task force. We used to, but it hasn't happened for a long time.

Some educators state their willingness to mentor newer educators and/or new DSMES/T site if external funding is made available to support time and travel costs. Several educators share their past efforts to initiate DSMES/T services in other communities as part of grant awards.

What I'd really love to do, I would love to say, 'hire me and I will come out to your clinic... you have the patients there and I'll teach. I'll educate.'

Educators advocate for greater support from the state to raise diabetes awareness and to market DSMES/T services.

I think having some basic programs that talk about managing diabetes successfully, the importance of it, and...information about the nearest diabetes education program. I know I live in an area that is more tapped into [diabetes] and I don't see nearly the concerns that a lot of rural areas do.

We need a marketing campaign to the public about what diabetes education is, helping them realize what they don't know. I think that would be money well spent if it was a state-wide effort.

Ideas for needed DSMES/T statewide messages:

- Get into diabetes education as soon as you are diagnosed with diabetes or pre-diabetes
- Diabetes education is important; you can control diabetes
- Diabetes is not a death sentence
- Diabetes is manageable
- People live long healthy lives with diabetes
- You can manage diabetes and still enjoy your life

Grants help support DSMES/T sites to expand services to additional community locations, conduct quality improvement projects, support professional development, obtain needed educational and administrative resources, and enhance communication and outreach efforts.

They [grants] have really helped us a lot. The most helpful ever was when we got to work with the business office and understand more about how to work with insurances and how to help our patients get the resources to come to class. There are lots of people without insurance.

One of the grants, allowed us to get a list of everybody and their insurances and what was covered and what wasn't. We haven't been able to do that again. Reimbursement is tough and time consuming.

Educators are eager to obtain funding to expand and improve their services.

Help with technology, a grant for obtaining new tech. If there was a grant that I was aware of that would help with the telehealth stuff, I would be all over that.

If we could get any type of grant money, it would be something to help those who are uninsured or underinsured.

To provide funding for A1c tests I think is huge. I know they [grants] aren't supposed to buy supplies, but I feels that's a big part of education.

Many educators relate that although they currently have administrative support for their services, they fear the day when funding decreases, and they are 'shut down' because they are not generating enough revenue. Generating more support for the intrinsic value of DSMES/T services is on the forefront of educators' minds.

We need to pull in the diabetes educators, and we are so far apart, all together so we can all work together to increase the awareness of diabetes. We all know diabetes education is not a money maker. We can't fight it saying we are going to make money, because we don't. The only thing we can fight if for is improving the health and that does make us money, but you don't see that up front.

Every educator finds navigating the complex health insurance system challenging; one educator wondered if the Idaho Department of Health and Welfare could lend support.

I think if the state were to have a person to contact different insurers and have a portal, or something, that anybody could go into... not just Blue Cross, that's just an example. They must have 50 plans and each one offers different amount of diabetes education. To have that information and a 'one stop shop,' would be so helpful.

I think most of us, that have been in this program long enough understand how to teach patients the basics, but I think it's the maneuvering around the billing and the insurance and the marketing.

They also seek solutions to maximize service reimbursement and resolve credentialing issues that limit their ability to provide comprehensive services which may be related to policy development.

I'll tell you what's the most frustrating thing for me is Idaho Medicaid. I can only be credentialed as a diabetes educator, I cannot also be credentialed as RD, so if I have a patient, and I've used all their diabetes education hours, I cannot see them for diet education under MNT because it's not a covered benefit. What would be awesome is, if we could manage their diabetes education and their MNT, but right now the state doesn't allow for that. You have to be credentialed as either CDE or RD.

If we could get an expert from Medicaid to help navigate Blue Cross of Idaho. That would be wonderful, not only for new technologies, pumps, etc., and for complex patients.

In an ever-changing health landscape, DSMES/T educators look to the Department to learn about emerging health care system issues (e.g., care coordination, population health, telehealth, service reimbursement, etc.); of particular interest to educators is the role Medicaid expansion will play on access to DSMES/T services.

In a fee for service model, it's true that the cost is a barrier, but in a value-based model it will be a completely different response.

We are always looking for more information on information that deals with healthcare population management changes. Like what initiatives are happening in Idaho that we can be a part of, and more training on care coordination and population health management.

DSMES/T Participant Focus Groups

Background

Given the short time period and the demands upon DSMES/T educators, we were able to conduct two 60-75-minute focus groups (listening sessions) in Public Health Districts (District 2 (N=4) and District 3 (N=5)). We were unable to arrange a focus group in District 7. We provided each District with recruitment materials including an email invitation, consent forms, and a listening session flier. Participants received a diabetes education resource for their time. All participants were English-speakers, while a majority (75%) were female and age 65 or older. The two sites were located in a rural-farming community and a small city; the rural-farming community offered DSMES/T primarily in groups and the city offered individual services. No participant completely lacked insurance coverage. See Appendix X for focus group questions.

Findings

Five major themes emerged from the DSMES/T participant listening sessions:

1. Awareness and perceptions about diabetes and diabetes management.
2. Catalysts for engaging in services.
3. Benefits derived from services
4. Obstacles for accessing and continuing services.
5. Opportunities for improving services and expanding DSMES/T services to reach greater numbers of people with diabetes.



Awareness & Perceptions

What I hear all the time is that there's no cure or I'll just get the shots or take the medicines.

The evaluator asked the participants about their awareness, knowledge, beliefs, attitudes, and perceptions about diabetes and DSMES/T services. When asked what people associated with the word diabetes, the most common response was "death."

It used to be every time they said you had diabetes, you didn't have long to live. I heard that a lot.

I think they automatically hear diabetes and think insulin, 'I'm going to die.' It's tragic to them, but really, it's not that bad.

Participants shared a lack of knowledge about diabetes in general, diabetes treatment, and management prior to receiving DSMES/T.

I didn't know anything about diabetes ever. It's not in my family. I don't know anybody that has it, except you guys. I'm still in shock because I feel like I don't have it.

The first one diagnosed me as pre-diabetic, and at the time I didn't know what that meant. Or, what's the difference between pre-diabetic and diabetic?

One thing I have noticed was there was no telling us what type 2 diabetes is and how it works in our bodies. And the ones who have to take insulin, why they have to take insulin.

I didn't know how to eat or exercise. Or how it affects you. It affects lots of things in your system and has lots of complications.

Several participants expressed misunderstandings that they, and others they know, have had about diabetes management.

I think a lot of people believe that you have to go on a really strict diet and that's not necessarily true. Their life is going to be over because they will have to cook separate for them than for their families.

I was shocked to find out I could take a prescription. I had no idea. As soon as they started talking about diabetes I said, 'I'm not taking a shot.' She said, 'You're going to take Metformin and go to these classes.'

I think they think you have to chop off all eating, and you have to go to the church, and can't go to the bar.

Participants spoke about the shame, guilt, and blame that accompanied a diabetes diagnosis. These strong feelings discouraged some from seeking care.

I also think that if you are type 2 then people think it's your fault and you haven't tried. And if you did the right thing you could get rid of it.

I think being told you have diabetes means you didn't do something right. You didn't follow the rules. You ate pounds of candy, which I did.

I think there is a feeling of failure. The body is failing you, and you are angry about that, or you have caused this. You made a huge mistake and your life is over. I think it is a difficult topic.

Most participants lacked understanding about diabetes complications and the importance of blood glucose control prior to DSMES/T services.

I don't think people understand the complications. You might hear about amputations or with my friend who lost her sight, but I don't think people know about all the complications and what happens to you biochemically and how important it is to control it.



Catalysts and Motivations

Participants were asked to describe what triggered their response to seek out DSMES/T services.

Referrals from health care providers, family and friend support, and health screening results were the three primary factors which influenced participants to seek out and continue DSMES/T services.

DSMES/T referrals from health care providers knowledgeable and supportive of DSMES/T services was the most often cited catalyst. Several participants stated they saw advertisements about DSMES/T; however, most sought services based on referrals and recommendations from people close to them. Most participants felt the services were affordable because they had Medicare.

My physician recommended a class, it scared me.

She [doctor] not only referred me, she made me. She said, 'We're not playing that game this time, you're going to the meeting,' I said, 'ok'. She's very committed. I love her.

The first time I said, 'No, I don't want to go.' She said that if I couldn't get it [blood sugar] down, I'd have to go, and I promised her. I try to keep my word.

When she [wife] heard about the program...in the paper... she encouraged me to take it.

Easy access to services and meetings located in a pleasant setting enhanced DSMES/T participation. Participants of one facility commented that onsite food, exercise rooms, and facilities for cooking demonstrations were valued assets.

I like the idea that the facility has parking. You can arrive 20 minutes before and have time for a cup of coffee.

Several respondents wish they had heard about DSMES/T services earlier.

If my physician had recommended a class when I was pre-diabetic, then maybe I never would have ever gotten diabetes. The first three physicians never said a word about a class. The last one did.

My first trip to the doctor he told me I had pre-diabetes or type 2. He dumped it in my lap. He didn't say where to go or what to do.

Others related that they had experienced health care providers who did not take their health complaints seriously; as a result they were not tested for diabetes in a timely fashion.

I was overwhelmed. I didn't feel well, and I had gone to several doctors saying I didn't feel well and they poo-pooed me.

One day I went in and said I wanted to be tested. They laughed and said they would. My blood sugar was 400. I had been to the eye doctor saying I can't see. But everyone looks at me (a thin woman) and says, 'You can't be diabetic.'

Continued participation in DSMES/T was associated with individualized services and feeling supported and cared for by DSMES/T staff.

My first DSMES/T program, I didn't feel they cared. I came to [DSMES/T Educator] and she cares about the person. And she will not give up. She will help you as much as she can.

Others had received DSMES/T services in the past and returned for maintenance or other health concerns which required improved glucose control.

I came religiously for about 6 years and then I got some cancer and chemo, so I dropped off. Recently I started coming back again because I have a hip operation coming up. I'm in the range for (A1c) but I need to lower it a little.



Benefits, Education & Support

It [DSMES/T] probably saved my life.

Overall, the participants found DSMES/T services helpful, informative, and supportive. Most participants related that the content was interesting and that the educators were able to make complex information understandable.

I started the diabetes program here two years ago and just finished the maintenance program. And both of those were fabulous, especially the first-year program.

The content of the material... was varied, there were a lot of challenges that everybody had, it was...something I thought I could commit to. It was a well-thought-out program.

The education topics most often mentioned included: diabetes (including glucose metabolism, insulin action, etc.), carbohydrate counting, physical activity guidelines, and the behavioral change process.

This program is so positive for everybody.

The nutritional aspect was very interesting to me. And the carb aspect. I've been a meat eater all my life. I'd really just rather eat meat every meal. But I do understand that carbohydrates are necessary.

I did learn a lot. I didn't know much about the carbs versus the sugar and the fat. It was interesting.

... specific information that was medically oriented was really helpful. Information about how your body reacts to insulin and what's happening with insulin in the body was really helpful. I don't have a medical or science background.

Most participants were pleasantly surprised about the education received, they expected to be told to follow a very restrictive diet, give up all their favorite foods, and follow regimens that would turn their life upside down.

Small things, you can do small things, it doesn't have to be major. You don't have to go all the sudden to this new diet. You can manage within what you normally eat.

The behavioral change process was very slow, very methodical, very easy going.

All participants reported that DSMES/T dramatically increased their awareness and their ability to control the disease. Many commented on the importance of the individualized education and support they receive in managing their medical condition.

It's not one size fits all. It has to be individualized. It needs to be tailored for your situation.

That's the first real support I've had. She [DSMES/T Educator] cares, and she will tell you what you need to be doing, and that helps.

Despite one group of participants having received DSMES/T support individually while the other occurred in a group setting, both groups had positive things to say about receiving education and support in a group setting.

The group function for me was really effective. Getting together and talking to other people. Even if I was having a terrible week, coming back and having another session to talk to somebody else, and sit and listen, and re-center myself was really helpful. The maintenance program was once a month, and again it was just really helpful to come together and recommit to what you are doing.

One thing I've seen with group support is you can call them and say I'm hungry for chocolate. And she can talk to me and in 10-15 minutes, my chocolate craving is gone.



Obstacles, Personal & External

You go to the doctor all the time; how come they aren't telling you - you have pre-diabetes?

Participants were asked about obstacles and barriers to access, receive, and continue DSMES/T services. Prompts included personal and external obstacles.

Personal obstacles to accessing DSMES/T services included incredulity, fear, guilt, and shame about having diabetes and their lack of knowledge and skills to seek diabetes education.

I think being afraid. It's very overwhelming. When they first told me, they sent me with a meter and told me to check my blood. Next thing I knew, I had insulin. And I thought, 'I can't do this.' And then I had to.

And now they tell me I have it; and I say, 'no I don't. It's just a family thing.' So, denial. I have a lot of trouble saying I have it because I don't have symptoms.

Participants relayed that some people are resistant to making changes because they are uninformed about diabetes management.

I have a good friend who has diabetes and he just says, 'If the meds don't take care of it, I don't care,' He eat what he wants.

I think that's kind of like ignorance though. We all eat well. It's not flat out water and crackers. Just make a few choices... I just stay away from sugar. It's not the end of the world.

Some participants expressed feelings of fatigue and frustration associated with managing a chronic disease. Another issue shared was lack of support from friends and family.

Well you do get tired of sticking your fingers every day, minding what you have to eat every day. Every once in a while, I just think, 'I'm sick of this, I'm not going to do it anymore.'

When I go out to eat, I try to do my carbs and people say you don't need to lose weight. I tell them I'm not trying to lose weight, I'm worried about my diabetic health. I try not to overeat, and they look at me.

External barriers included lack of referrals from health care providers, insurance coverage and cost of services (especially for those not on Medicare), work schedules, and transportation.

I think maybe the medical professionals can be educated to provide this information when you are first diagnosed.

They [health care providers] are worried about hearts and lungs and stuff. Maybe they are like us and just figure everyone gets it [diabetes] after a while.

My other one [obstacle] was insurance, or not knowing if you qualify for education. I think that's a big hindrance for people. It should be available for everyone.

It is important to note that only one participant was working a traditional 40-hour work-week.

I just started a new job...so it's harder for me to get time off.

Being retired made it really easy. But if I had been working, my classes were Wednesday morning for an hour and a half and I wouldn't have been able to make it.

Participants discussed barriers to successful diabetes management including the use of diabetes equipment, access to the web for resources, and the readability and understandability of some of the diabetes educational resources they had received.

I haven't had very good luck with pharmacists. I got a new machine and he didn't know to use it. I didn't know how to use it. I still don't know how to use it. Our machines should be set up so you can put the data in. We need education on using meters.

*I have a carb counter book and it's really small.
I can hardly see the print. Even with
my glasses, I have to read it closely.
It needs to be readable.*

Another important obstacle to successfully managing diabetes was the cost of healthier food and access to healthful food in their day-to-day activities.

*I'm retired and on a limited income.
Fruits and vegetables are a little more spendy
so it's easier to eat crap. And that's what I've
done for the last few years because I don't have
kids or a husband to make sure I eat good.
I've found that the cost [of healthier food]
is a little hard to do.*

*Well they [churches] have their Sunday
[refreshments] and dinners and it's hard for the
diabetics; I wish I could have some of that.*

One group suggested that the information presented might pose a barrier to people interested in 'alternative' diets, such as the Paleo diet.

*There was a lot of discussion about alternative
diets... So, if somebody just absolutely did
not believe that the information pertained to
them, it would be really hard to get them to
participate. It's so mainstream.*



Opportunities & Expanding Services

Participants were asked for suggestions to improve DSMES/T access and services and ideas to expand DSMES/T services to a larger number of people with diabetes in Idaho.

Although mostly satisfied with the DSMES/T service offerings, participants shared ideas for the quality and quantity of the educational content. In general, participants had a thirst to learn more about nutrition and physical activity, regulating blood sugar, medication, and using diabetes medical equipment.

*I think [knowing] how high the blood sugar
should be. What is normal and what
is too high and what you should really
be concerned about.*

*I think carb counting is important. And I
would like to know carb ratios to insulin.
I think that's difficult to decide. Also,
activity impact on insulin.*

*And meal planning. I think that's a big thing.
You kind of get burnt out for one thing. If there
was more simple, easy to fix meals, quick. You
can go on the web. I get on, but it's not easy.*

*If a physical therapist, or someone from the
gym could talk...I mean, we're older folks
and none of us are as strong or as active as we
used to be...everything I get online
is for these young studs.*

*We need to know the types of exercises.
Aerobic or resistance, or vice versa.
Or how much of each.*

Different wishes and desires were expressed depending on the participant's age, economic and educational status, type of diabetes, and understanding about the disease. For example, participants from a university community expressed interest in higher-level information.

*Some of the content was a little simple. So,
in the story aspect every week, it was so silly.
I would like to hear more real, sophisticated
stories. Something happening locally. They
were just too simple.*

I think a really important thing is if a biochemist would come in and explain what is happening. You know, why your body is doing this. Or a physician or whatever.

Participants expressed a desire to increase their knowledge and skills to manage diabetes. Suggestions included more reading materials, videos, and opportunities to build skills (cooking, menu planning, using medical devices). Upon describing telehealth, participants felt telehealth could reach people in remote areas, but most expressed a preference to meet educators face-to-face. Most people expressed interest in more services, not less.

We had cooking classes too...I went home and tried the recipes. They brought in a chef and she was a really great presenter and makes it simple.

I would recommend a program longer than a month. I would recommend at least three months, where you came once a week and you really got into depth.

The participants were eager to share their ideas for expanding DSMES/T services. Greater public awareness about diabetes and DSMES/T services was the most frequently suggested idea. Although they felt that health care provider referrals were very important, participants felt that greater public awareness about diabetes and DSMES/T could bring about earlier diagnosis and entry into DSMES/T services. One community identified specific key local communication leaders who could expand diabetes and DSMES/T awareness via the local radio, newspaper, website, events, and fliers. Participants state that they rarely noticed stories about diabetes or DSMES/T in the local paper, TV, or radio.

Why couldn't we have a 'come get checked for diabetes' day?

But if there was an article about the program and people who have been through it. Varied success and there's all these efforts to continue together. A personal story may capture somebody's attention.

Most were engaged with some sort of civic or religious organizations and felt those groups were good avenues for increasing DSMES/T service awareness. Marketing and outreach of DSMES/T services to men was a concern.

There are so few activities that men gather to participate in, where women don't have that problem.

Many suggestions were offered to reach people with diabetes, including faith communities, senior citizen gatherings, health fairs, Fit and Fall Proof classes, and extending education to the schools to educate young people and families early.

The fact that this program is so positive for everybody. So, their gatherings, clubs that are meeting on a regular basis, the people who knit together, League of Women Voters...

All service clubs. Rotary, 40% of the guys are overweight and they know it.

A repeated message was the importance of pre-diabetes education and screening to prevent diabetes and future complications. Participants also suggested educating other health professionals (dentists, ophthalmologists, podiatrists, etc.) about DSMES/T services as they are likely to encounter people with diabetes risk factors and symptoms.

I think what should be emphasized most is pre-diabetes. I had no clue. I don't think I was tested to even say that I was. If you have pre-diabetes, I think you can change. Whereas, when you get it, it's harder and there are complications.

There's a couple I would recommend - having the eye doctor. 'I can't see, I can't see.' When I say, 'I can't see,' why doesn't the doctor say, 'Let me check for diabetes?'

Last, the groups discussed the key messages and educational resources they felt could increase participation in DSMES/T services. They suggested diabetes literature that was readable and widely available in libraries, clinics, and senior centers. They thought messages should stress that diabetes is controllable, and that education and support is available. Including information on obtaining needed diabetes supplies and financial support was also identified as important for access. Both groups supported prevention messages for young people.

You know I think it is kind of a public education, too. Everywhere they push no smoking because you are going to die of cancer. But more people have diabetes than have had lung cancer.

I think you ought to make an effort with the schools to let them know this is not funny. If you are obese, if you're 20-30 lbs. overweight at 16 it is easier to take it off when you're young.

I think you would need pamphlets and testing materials. And I don't know what a meter is, I don't have one. Have someone explain that and what it means.

Participants offered messages for campaign ideas. They felt that sharing information in a Public Service Announcement (PSA) story or poem format would attract attention.

'It's possible' sounds good because it's possible you have it, it's possible you could help it... It's possible you can control it. It's possible the foods you're eating...I'm seeing a sign, with 'It's Possible' across the top.

Individuals had mixed responses to web-based educational resources. Users of online resources and applications users welcomed the idea of more help to access valid diabetes information; other infrequent-internet users voiced concern that they were not 'tech

savvy,' didn't own a computer or had limited access, and/or an inclination to obtain electronic information.

I don't use the web, but most people do. Or the apps on the phone? I'm not sure about electronics.

Several participants thought that offering rewards and/or incentives would encourage DSMES/T engagement.

So why don't you give a pack of free strips, or a prize that someone would get a new meter or a coffee cup that says, 'Drink More Water?'

Conclusions

1. People are more likely to participate in DSMES/T when they receive a clear and encouraging referral from their health care provider.
2. DSMES/T services are highly regarded, and most individuals wish they were referred to services earlier. Individualization of services is important to people with diabetes.
3. People with Medicare have fewer concerns about the affordability of DSMES/T services than people with other insurance coverage options.
4. Many misperceptions about diabetes and diabetes management exist; few individuals are knowledgeable about diabetes or diabetes care prior to receiving DSMES/T services.
5. Most participants appreciate group sessions as long as their care is also individualized.
6. A range of education and information is needed for people with diabetes to accommodate different levels of health literacy, knowledge, and skills.
7. Multiple outreach strategies are needed to reach people with diabetes, especially to reach men who are less likely to participate in DSMES/T services.

DSMES/T Conclusions and Opportunities

Overall, the DSMES/T services provided in Idaho reach thousands of people each year and are greatly appreciated by DSMES/T recipients. The number of DSMES/T sites continues to increase along with educator's efforts to reach a greater number of rural Idahoans. Service gaps in the state remain, particularly in the most rural and remote communities and among Hispanic and other non-English speaking populations.

The following conclusions are drawn from face-to-face and remote (phone) interviews with DSMES/T educators and two participant focus groups. The opportunities identified are recommended actions based on the interview findings and are supported by diabetes education literature. These actions are suggested to further increase the number, capacity, quality, and sustainability of DSMES/T programs serving people with diabetes in Idaho.

Health Care Provider Referrals

Physician or health care provider referral is required for Medicare DSMES/T reimbursement and is a primary driver for DSMES/T participation. The majority of DSMES/T educators welcome more referrals to, and support for, DSMES/T services.

Opportunities to increase referrals made by health care providers to DSMES/T services through education, outreach, and marketing to the medical community:

- Direct marketing of DSMES/T services to health care providers.
- Develop continuing education outlining the benefits of DSMES/T services and referral procedures.
- Incorporate DSMES/T content in the training and education of health care providers.
- Ensure consistent messaging about DSMES/T services between health care providers and diabetes educators.

Outreach and Marketing

A prevalent overarching concern describes misinformation about diabetes and the lack of awareness about, and availability of, DSMES/T services in Idaho.

Opportunities to increase public awareness of diabetes and DSMES/T services through local, regional, and statewide marketing and outreach:

- Provide training on effective outreach and marketing strategies for time and resource limited DSMES/T sites.
- Engage Public Health Districts in DSMES/T outreach and marketing efforts to work directly with local communities.
- Develop a statewide campaign aired on television, radio, and social media to raise awareness about the benefits of DSMES/T services.
- Target DSMES/T service outreach and marketing for people with lower health literacy, living in rural areas, and non-English speaking Idaho residents.

DSMES/T Service Access

Access to DSMES/T services is greatest in urban areas, within hospital networks and/or medical care settings. Some hospital networks are expanding DSMES/T services into rural areas. Recent DSMES/T service closures in some for-profit hospitals has created DSMES/T service gaps. Individuals who are uninsured, underinsured, and do not speak English face the greatest access barriers to DSMES/T services in Idaho.

Opportunities to increase the possibility for all Idahoans with diabetes to access high caliber DSMES/T services:

- Assist DSMES/T educators to identify public and private (commercial) DSMES/T insurance coverage for the participants they serve.
- Explore options to support free or reduced cost DSMES/T services for participants who are unable to afford diabetes education.
- Continue to identify and help grow DSMES/T services in geographical areas that are under-served, and in areas where people with diabetes are uninsured or under-insured.
- Maintain and publicize a current directory of all DSMES/T services in Idaho.
- Help address the need for Spanish speaking DSMES/T educators and support staff.

- Consider supporting established DSMES/T programs to expand services in unserved areas.

DSMES/T Professional Development

Access to professional development and continuing education is a financial challenge and burden for most DSMES/T educators at smaller sites; larger DSMES/T sites generally have the capacity to extend learning opportunities for educators. Free and/or low-cost professional development is not readily available for all educators.

Opportunities to support DSMES/T continuing education requirements:

- Provide and/or support accessible and affordable in-person or web-based DSMES/T continuing education.
- Continue to help link DSMES/T educators, particularly those in rural communities.
- Consider developing and/or supporting DSMES/T mentorships between experienced and less-experienced DSMES/T educators.
- As possible, develop agreements between neighboring states offering DSMES/T continuing education and Idaho DSMES/T educators desiring education.
- Explore diabetes education needs of health care providers (especially those serving rural areas) to identify feasible approaches to increase DSMES/T knowledge and awareness and diabetes education best practices.
- Consider the development of regional DSMES/T educator networks to address regional educational needs and build systems of information sharing and support.

DSMES/T Quality Improvement

Quality Improvement studies add value to DSMES/T services and provide needed evidence of the effectiveness of diabetes education. Most sites require external funding and support to conduct quality improvement studies.

Opportunities to maintain and surpass the high quality of DSMES/T services available in Idaho:

- Continue to support quality improvement projects, particularly those identifying the benefits and short-and long-term cost savings of DSMES/T services.

- Highlight successful quality improvement studies and communicate the processes and outcomes with DSMES/T educators throughout the state.
- Consider supporting quality improvement professional development training by ADA and AADE.
- Provide technical and/or financial support for needs identified through quality improvement studies, e.g., outreach and marketing, educational resources, professional development, physical space expansions, etc.

Technology

Diabetes care and education technology opportunities are evolving quickly. The use and access to new and emerging technology is uneven across the state. The largest DSMES/T service sites have greater capacity to deliver technology-enabled education to the participants they serve. Telehealth is increasingly available in Idaho for many medical conditions; a few sites in Idaho are using and/or exploring telehealth for DSMES/T services.

Opportunities to capitalize on the benefits of technology offers DSMES/T services:

- Assist DSMES/T educators to address challenges faced with incompatible EHRs and DSMES/T service-tracking needs.
- Provide technical and/or financial assistance to enhance and increase DSMES/T telehealth.
- Support opportunities for DSMES/T educators to gain skills and knowledge as new diabetes technologies emerge.
- Prioritize telehealth opportunities in remote and underserved areas and include access to culturally responsive telehealth services for non-English speakers.
- Explore financial barriers excluding DSMES/T participants from acquiring health enhancing diabetes technology (e.g., CGM).

New Emerging Diabetes Education and Self-Management Issues

Health care is changing at a dizzying rate. The diversity of rules and regulations that govern reimbursement for DSMES/T services are complex, variable, and at times, outdated.

Opportunities to support DSMES/T educators in an ever-changing health care landscape:

- Provide direction and support for delivery of DSMES/T services as value-based healthcare systems of care and reimbursement emerge.
- Help support and equip DSMES/T educators to share the value of high-quality diabetes education and support.
- Assist DSMES/T educators in understanding upcoming Medicaid expansion and other emerging health system changes and the opportunities presented for DSMES/T services.
- Support increasing insurance coverage for DSMES/T services and Medical Nutrition Therapy to allow for sufficient time to educate and support people with diabetes.

Appendix 1



Statewide Diabetes Self Management and Education and Support/Training (DSMES/T) Assessment

Interview, Focus Group, and Analysis Protocol

February 28, 2019

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Project Purpose

To work with the Idaho Department of Health and Welfare, Division of Public Health, Diabetes, Heart Disease and Stroke Prevention (the Department) to develop, administer, analyze and disseminate results of a statewide assessment of the Diabetes Self Management and Education and Support/Training (DSMES/T) programs which provides diabetes education to populations in Idaho. The assessment will include the following elements:

1. Diabetes Educator barriers surrounding enrollment, retention, and completion of DSMES/T programs.
2. Patient barriers surrounding enrollment and completion of the DSMES/T programs.
3. DSMES/T referral processes, disparate population reach, aggregate payor-source information, and aggregate number of patients served.

The end goal is to inform the Department of any barriers, opportunities, or strategies which may enhance DSMES/T services, activities and support of diabetes education in Idaho.

Project Design

The statewide DSMES/T will utilize qualitative action research methods to conduct interviews among Idaho DSMES/T Program Coordinators (n=41) and focus groups (n=3) among DSMES/T participants (n=18-24). The assessment methods are intended to determine potential barriers and recommendations for DSMES/T program enhancement and improvement.

The DSMES/T program coordinator interviews will provide descriptive information on DSMES/T program operations (program reach, numbers served, referral processes, etc.) and program barriers surrounding enrollment, retention, and completion of the DSMES/T program. The factors considered for face-to-face vs. phone/online interviews include: program size, geographical diversity, rural representation, ethnic/racial equity, and program interest. Conducting interviews will provide a greater depth of information from DSMES/T program coordinator than is believed to be obtainable through surveys.

The project will include three focus groups of approximately 8-10 DSMES/T participants recruited

by DSMES/T program staff. The factors considered for location of the three focus groups include: geographical and racial/ethnic diversity, program size, accessibility, and willingness on the part of the DSMES/T program to participate in the recruitment of focus group participants. The focus group participants will provide needed insight into the acceptability of DSMES/T program content and delivery methods, as well as barriers to program participation, retention, and completion. The focus group questions will focus on DSMES/T programmatic concerns, content, and operations. No sensitive or private medical information will be asked of participants.

The University of Idaho Evaluator will work with Registered Dietitian Nutritionists (RDNs) experienced with DSMES/T, to conduct interviews and focus groups. The Evaluator will employ qualitative research methods to analyze the data collected and create a report of the findings for the Department. Permission to disseminate results to participating DSMES/T programs will be determined by the Department staff.

The anticipated dates for interview and focus group are late-March through May 2019, pending project approvals. The project is conducted as an assessment, not research. The results are not generalizable beyond Idaho DSMES/T programs and the assessment results will not be disseminated beyond the Department unless permission is granted by the Department.

The project proposal and scope of work was submitted for review by the University of Idaho Institutional Review Board (IRB), Human Research Protections. The project was determined exempt from IRB review as the project did not meet the criteria for research.

Project Setting

The DSMES/T interviews will take place in DSMES/T program settings (via face-to-face interviews or telephone/online). The DSMES/T participant focus groups will take place in three different DSMES/T program settings. The exact locations of the face-to-face interviews and the focus groups will be determined in conjunction with the Department staff. The Evaluator will work with Department staff to ensure that statewide representation and fairness is considered in the selection of interview and focus group sites. The analysis of the interview and focus group data

and project report generation will take place at the University of Idaho, Moscow campus.

Participants

DSMES/T program coordinators (n= 41) will be recruited to participate in either face-to-face or telephone/online interviews. The Department staff members identified 10-15 priority sites to be considered for the face-to-face interviews; the remainder of DSMES/T program coordinator will be interviewed via remote methods, either by telephone or using a web-based platform (e.g., Zoom, Skype). Interview selection will be based on statewide representation, program size, and programmatic needs.

The DSMES/T focus group participants (n =18-24) will be recruited from three DSMES/T programs in the Northern, Central, and Southern regions of Idaho. Any person over the age of 18 who has participated in a DSMES/T program is a suitable focus group participant. DSMES/T program coordinator will arrange focus group dates and times with the University of Idaho Evaluator. The DSMES/T program coordinator will be asked to recruit focus group participants and inform them of the date, time, and place of the scheduled focus group. The Evaluator will provide the DSMES/T program coordinator with a focus group recruitment script and reminder messages. Focus group participants will receive a small remuneration for their participation. The Evaluator will plan to provide focus group participants with light refreshments meeting dietary recommendations for persons with diabetes. The Evaluator is a Registered Dietitian Nutritionist (RDN) and knowledgeable of dietary recommendations for persons with diabetes. No attempts will be made to stratify the groups by gender, age, or other factors.

Informed Consent

The Evaluator will fully review the Informed Consent with DSMES/T program coordinators and participants (see attached) and will reiterate that participation in the interview and focus groups is entirely voluntary, that participant responses will be kept confidential, and that, by signing the consent form, the group agrees to confidentiality of all responses. Each participant will sign two copies of the consent form, one for their records, and one for the evaluator. Informed consent will be obtained via email for DSMES/T program coordinators participating in interviews either by phone or online. All consent forms will be kept in a locked file at the University of Idaho. At the completion of the project, the consent forms will be destroyed.

Interview and Focus Group Questions

The Evaluator will propose and submit an Interview Guide and a Focus Group Interview Guide containing the questions and script for approval to the Department. Interview and focus group questions and processes were determined based on a review of the literature and in consultation with the Department staff.

Upon feedback from Department staff, the Evaluator will make any needed changes, additions, or deletions to the interview and focus group questions and/or processes. The questions and processes will be pre-tested with experienced qualitative researchers at the University of Idaho and piloted with two DSMES/T program coordinators who represent a clinic and a hospital program setting. Following each interview and focus group session, the Evaluator will seek feedback on the questions and the process used to make any needed refinements.

The primary areas of inquiry for the interviews and focus groups include:

DSMES/T Program Coordinator Interviews

1. General descriptions of DSMES/T program process, procedures, operations, and participation, and participant characteristics.¹
2. Attitudes, perceptions of facilitators, and barriers that impact program participation, retention, completion, and impact.^{2,3,4}
3. Programmatic challenges related to costs, increasing coverage and insurance reimbursement, and claim denials.^{1,5,6}
4. Strategies, challenges, and recommendations for DSMES/T program referral, support, training, and resources.⁷
5. Challenges and opportunities to adhere to DSMES/T standards, staffing and accreditation.^{8,9,10}
6. Other ideas, opinions, questions, and preferences offered by the group to improve DSMES/T participation, retention, completion and impact.

¹ Piatt, G., Siminerio, L.M. & Zgibor, J.C. (2005). Implementing the chronic care model for improvements in diabetes care and education in a rural primary care practice. *The Diabetes Educator*, 31(2), 225-234.

² Bowman, P., Killeen, M., & Sullivan, E., (2011). Disparities in diabetes self-management education for uninsured and underinsured adults. *The Diabetes Educator*, 37(6)813-819.

³ Peyrot, M., & Rubin, R.R. (2008). Access to diabetes self-management education. *The Diabetes Educator*, 34(1), 90-97.

⁴ Davis, R. M., Hitch, A.D., Salaam, M.M., Herman, W.H., Zimmer-Galler, I. E., & Mayer-Davis, E.J. (2010). Telehealth improves diabetes self-management in an underserved community. *Diabetes Care*, 33(8), 1712-1717.

⁵ Burton, J., Eggleston, B., Brenner, J., Turchil, A., Zulkiewicz, B.A., & Lewis, M.A., (2017). Community-based health education programs designed to improve clinical measures are unlikely to reduce short-term costs or utilization without additional features treating these outcomes. *Population Health Management*, 20(2), 93-98.

⁶ Glover, S.H., Laditka, S.B., Powell, M.P., & Probst, J.C., (2005). Barriers associated with the delivery of Medicare-reimbursed diabetes self-management education. *The Diabetes Educator*, 31(6), 890-899.

⁷ Harris, S.M., Joyce, H., Miller, A., Connor, Co., Amiel, S.A., & Mulnier, H. (2018) The attitude of healthcare professionals plays an important role in the uptake of diabetes self-management education: analysis of the barriers to uptake of type 1 diabetes education (BUD1E) study survey. *Diabetic Medicine*, 35(9), 1189-1196.

⁸ Morgan, J.M., Mensa-Wilmot, Y., Bowen, S.A., Murphy, M., Boner, T., Rutledge, S., & Rutledge, G. (2018). Implementing key drivers for diabetes self-management education and support programs: early outcomes, activities, facilitators and barriers. *Preventing Chronic Disease*, 15.

⁹ Hodorowicz, M.A., (2012). Reimbursement for shared medical appointments incorporating diabetes self-management education/training or diabetes medical nutrition therapy. *Diabetes Spectrum*, 25(2), 84-90.

¹⁰ Czarnowski-Hill, J.V. (2007). Diabetes self-management education and third-party reimbursement: what are the options? *Current Diabetes Reports*, 7(5), 381-385.

DSMES/T Participant Focus Groups

1. General perception and attitudes about the quality, quantity, content, and accessibility of DSMES/T services.^{3,11}
2. Attitudes and perceptions about facilitators and barriers for DSMES/T program participation.³
3. Perceptions of the relatability, effectiveness, and appropriateness of DSMES/T methods and content.⁸
4. Awareness of DSMES/T program offerings, referrals, resources and payment coverage.²
5. Other ideas, opinions, questions, and preferences offered by the group to improve DSMES/T participation, retention, completion, and impact.

Methods

DSMES/T Program Coordinator Interviews and DSMES/T Participant Focus Groups

The evaluator will provide the Department with a letter of introduction for DSMES/T staff outlining the purpose of the DSMES/T assessment and a request for location, date and time for a face-to-face or phone/online interview. The Evaluator and the RDN associates will conduct the in-depth, 60-minute, semi-structured interview (with face-to-face or phone/online). The Evaluator will request permission to record the interviews. The Evaluator will train RDN associates to assist in face-to-face interviews and to conduct phone/remote interviews independently. Interviewees will receive a token diabetes education resource for their participation.

The Evaluator will work with the Department staff to identify three DSMES/T programs from which to recruit DSMES/T focus group participants. The evaluator will provide Department staff with a letter outlining the purpose of the DSMES/T assessment and a request for assistance to recruit DSMES/T participants (n= 8-12) for a 90-minute focus group.

¹¹ Tang, T.S., Funnell, M., Sinco, B., Piatt, G., Palmiasano, G., Spencer, M.S., ...Heisler, M., (2014). Comparative effectiveness of peer leaders and community health workers in diabetes self-management support: results of a randomized controlled Trial. *Diabetes Care*, 37(6), 1525-1534

The Evaluator will seek assistance from the DSMES/T program coordinator to secure a location, date, and time for each of the three focus groups. The Evaluator will provide the DSMES/T program coordinator with a script to recruit focus group participants and another script to remind them of the upcoming focus group. Focus group participants will receive a diabetes-related educational resource, not to exceed a value of \$20.00. DSMES/T program coordinators assisting with the focus group site selection and participant recruitment may select to receive diabetes education resources not exceeding a value of \$200.

The interviews will be recorded and transcribed (edited transcription for the interviews and verbatim transcription for the focus groups). The Evaluator and associates will verify the transcripts by listening to the recordings while reviewing the transcripts and making any needed corrections. The transcripts will be analyzed by the Evaluator and associates, using an interactive coding process with consensus and triangulation on final thematic findings. The Evaluator will independently assess the salience of themes by performing theme counts and noting the emphasis of themes by participants. The evaluator and associates will review theme counts and agree on themes important to maximize reliability and validity of the processes used. The transcripts will be shared with the Department staff.

All interview and focus group recordings will be destroyed/erased upon successful transcription of the content. The transcriptions will be stored on an encrypted computer drive, and any hard copies retained will be stored in a locked file cabinet at the University of Idaho. At the conclusion of the project, all electronic and paper copies of the transcription will be destroyed.

Interview Methods

Interview Agenda

- Introduction and review of interview purpose
- Review and sign Informed Consent Form - (Remote interview- in advance of interview, an Informed Consent Form will be sent to sign and return prior to the interview).
- Ask/receive permissions to record
- Convene the interview
- Conclude the interview and thank participant

Interview Supplies and Materials

- Digital recorders (2), new batteries and a spare set.
- Interview attendance sheet and consent forms. (Sent in advance for phone/online interviews).
- Writing materials, flip-charts, pens, tape and other resources as needed.
- Participation remuneration item and receipt sign-in sheet.
- Mail a letter thanking the interviewee for their participation; for phone/online interviewees, include small participation remuneration.

Focus Group Methods

Focus Group Agenda

- Welcome and Introductions
- Review Purpose of the Listening Group; ask/receive permission to record.
- Review and sign Informed Consent Forms
- Convene the Listening Session
- Short Refreshment Break
- Re-convene the Listening Session
- Conclude Listening Session – Final call for comments, opinions, and questions
- Adjourn and thank participants

Focus Group Supplies and Materials

- Digital recorders (2), new batteries and a spare set.
- Focus group attendance sheet and consent forms.
- Signs, name badges, table tents for names.
- Writing materials, flip-charts, pens, tape, and other resources as needed.
- Participation remuneration item and receipt sign-in sheet.

Assessment Result Reporting

The data from the focus groups and interviews will be organized and presented thematically, highlighting unique findings and common themes identified by all three groups. No identifiers of individuals or DSMES/T programs will appear in the report. The final report

will include key quotes from DSMES/T program coordinator and participants. The final report will contain an abstract, introduction, methods, results, discussion, and conclusion.

Focus Group Tools and Resources

1. Focus Group (Listening Session) Interview Guide
2. Focus Group Informed Consent Form
3. Script for Focus Group Recruitment
4. Focus Group Sign-in Sheet

1. Focus Group Interview Guide

Statewide Diabetes Self Management and Education and Support/Training (DSMES/T) Assessment

Focus Group Interview Guide

GREETING:

Thank you for being here today. We really appreciate you taking the time to be here with us and for your participation in this discussion.

(Facilitator): My name is Helen Brown.

(Notetaker): My name is Leah Severson, and we're from the University of Idaho in Moscow.

PURPOSE: 10 minutes

We are working with the Idaho Department of Health and Welfare, Division of Public Health, Diabetes, Heart Disease and Stroke Prevention program on the project called, Statewide Diabetes Self Management and Education and Support/Training (DSMES/T) Assessment.

We need your help to better understand what helps people to participate and complete a diabetes self-management and education and support/training program. The Idaho Diabetes, Heart Disease and Stroke Prevention program is interested in your opinions about the DSMES/T program, what you like about it, what you don't like, what can be done to make the education even better for you. We are not going to ask you any questions that have to do with your medical conditions, the status of your health, or your experience

receiving any medical care.

Before we begin, we'd like to stress that our team will keep everything said here today confidential. What you say will be used only to help the Diabetes, Heart Disease and Stroke Prevention program to try to improve the quality of DSMES/T programs. Nothing you say will be connected with your name. We ask that you also keep what you hear confidential and not repeat what we have discussed to anyone outside of this group. We hope you will feel free to speak openly but be aware of our limits in protecting your confidentiality.

We have several things to talk about today, so I may need to change the subject or move ahead at times. Please feel free to stop me if you want to add a statement, or if you have any questions. You may bring up an important point or topic that we have not thought about asking. We welcome your ideas. Our discussion today will last about 90 minutes. We will take a short break in the middle of the discussion time to provide participants time for their personal needs.

We will record the discussion we have today, and we will use this recording to share ideas with the Diabetes, Heart Disease and Stroke Prevention program of Idaho to improve DSMES/T opportunities. When we write up what we have learned from you, we might use direct quotes from this discussion, but we will not identify you individually. Any quotes that we do use will not be linked to a person or to a specific role of anyone in this group.

We have provided information on the Consent Form that describes the project; it also includes our contact information and the contact information of the of Diabetes, Heart Disease and Stroke Prevention program. We welcome you to get in touch with us to answer any questions you have or to hear more ideas from you.

Please read the Consent Form we have provided for you. Once you read it, by signing this form you agree to participate in the conversation today. Your participation is completely voluntary; you are free to stop at any time. Please sign both copies, turn one into us, and keep the other for your records.

Sign Consent Form

ROLES: 5 minutes

(Facilitator-Helen Brown)

My role today will be to ask questions about your perceptions and views on the DSMES/T program and to

keep the conversation going.

(Note taker-Leah Severson)

My job today is to take notes, but I may ask a few questions as well. I can't write as fast as people talk, so we would like to record this discussion. We want to be sure to get all of the important things that you say.

(Facilitator-Helen Brown)

The recordings will only be heard by those of us working on the project. We are now going to turn on the recorder. Does anyone have a problem with our recording the session now?

Let's begin by introducing ourselves and getting to know each other a bit. Also say one thing you enjoy about this time of the year.

Thank you for sharing that information about yourselves. Now, I'd like to ask you some specific questions, and remember there are no right or wrong answers.

QUESTIONS:

PART 1. – 40 minutes

1. Today, we are going to talk about Diabetes self-management and education programs. Can you tell us a bit about your experience in a DSMES/T program?

Probes

- How long have you been involved with a DSMES/T program?
- About how many sessions have you received?
- What sort of setting were you in? Hospital? Clinic? Other?
- Organization of the program- individual sessions? Group sessions? Both?

2. Please tell us about some of your thoughts and feelings about the DSMES/T program you participated in.

Probe for general impressions about DSMES/T

- Overall, what you liked about the program? Didn't like so well?
- Overall, what you thought about the content of the classes? What was important to you? Not so important? Did the classes cover what you feel you needed to know and learn about managing diabetes?

- Overall, what you thought about the structure of the classes?
- What did you most enjoy about the people offering the education content? Least enjoy?

3. Next, please tell us what anything that makes it easy for you to participate in DSMES/T?

Probes

- Ease of referral.
- Proximity to your home and/or adequate transportation.
- Convenient schedule for classes/sessions
- Likeable and/or knowledgeable educators.
- Insurance covers the costs and/or most of the costs.
- Fun and enjoyable.
- I have confidence I can control diabetes.
- Other?

4. Now, please tell us about anything that makes it difficult to participate in DSMES/T?

Probes

- Problems with referrals and/or lack of encouragement from medical provider
- Feelings about participating in the program, e.g., fear, shame, embarrassment, etc.
- Distance to the program and/or inadequate transportation
- Class/session times do not fit with my availability
- Do not believe the educators are knowledgeable, caring, available, etc.
- Insurance doesn't cover costs (or enough costs)
- Do not find it fun/enjoyable
- Do not have confidence that I can control diabetes
- Other?

Short Break- 10 minutes

PART 2. 40 minutes

5. Thank you for all your helpful insight. Next, we will talk about what could make a DSMES/T program even more effective for you and for other people who have diabetes. If the DSMES/T program could change one thing, what do you recommend that change be?

Probes

- Different content?
- Different and/or more settings?
- Telehealth/online options?
- Free services?
- Other ideas?

6. The goal of the project is for even more people to participate in the DSMES/T programs in Idaho. Getting the word out about the program is important. What are some of your ideas about getting the word out about the program? What would catch your attention? Your friend's attention?

Probes

- Referrals from health care providers?
- More marketing in public places? For example, recreation facilities, malls, senior centers, churches?
- What media is best for reaching people about the DSMES/T program? Radio? Newspaper? TV? Facebook? Social media? Radio, newspaper, TV, Facebook, or other Social Media sites?
- Referrals from other service providers? Examples?

7. In your opinion, what are some of the beliefs that people you know have about diabetes?

Probes

- Inevitability of diabetes once you have it?
- Diabetes is easy to control? Hard to control?
- Role of medication in control/lack of control?
- Other?

8. What are types of things that might keep someone from getting help to control and manage diabetes?

Probes

- Thoughts, feelings, and questions about diabetes.
- Lack of knowledge or misinformation about diabetes care and management.
- Physical barriers such as access to care, transportation, time, money, or distance.
- Probe for other environmental, cultural, or social factors that impact DSMES/T participation.

9. If it were up to you to come up with a plan to encourage people with diabetes to participate in a DSMES/T program, what would you recommend?

Probes

- Referral mechanisms?
- Payment or reward for participation?
- More programs in various locations?
- Other online learning options, e.g., telehealth options?
- Others?

Concluding remarks. Please think about what has been said and add any other comments that are important to you. Thank you for your participation. You have our email and phone number if you would like to add any other thoughts later on.

Please leave your physical address or email with us if you would like to see the results of the findings from our conversation today. Thank you. *(We will supply index cards to collect names, addresses and emails for those wishing to see the results of the conversation groups).*

At this point, the facilitator should ask if the notetaker has any questions. Pass out small participation remuneration and adjourn

2. Focus Group Consent Form

Statewide Diabetes Self Management and Education and Support/Training (DSMES/T) Assessment

Consent Form- Listening Session Interview

We have asked you to participate in an interview supported by the Diabetes, Heart Disease and Stroke Prevention, Division of Public Health, Idaho Department of Health and Welfare. The overall goal of this project is to increase the number of Idahoans with diabetes that participate in DSMES/T programs. This effort was supported by the Cooperative Agreement Number, DP18-1815PPHF18, funded by the Centers for Disease Control and Prevention (CDC). The information from this interview will be used by the Diabetes program to help DSMES/T programs serve people with diabetes even better.

This interview will last approximately 60 minutes. We have some light refreshments for you, feel free to stand up and move around as needed.

There are no anticipated risks involved in participating in this interview. All participants will receive a diabetes education resource for their participation.

With your permission, this interview will be audio recorded to help us better understand what you share with us. We will keep your responses confidential, and we will not use your name in any written reports. We might use direct quotes from this discussion, but we will not identify you individually. Any quotes that we use will not be linked to a person or to a DSMES/T program.

The information provided in this interview will be compiled with other data and information from DSMES/T program participants and reported to the Idaho Department of Health and Welfare. No individual or DSMES/T program will ever be identified by name in any written reports or shared with any DSMES/T program staff. Once the interview has been transcribed the recording will be deleted.

Your participation in this interview is completely voluntary. If you prefer not to answer a particular question, that is fine. You can pass. You may stop participating in the interview at any point. Please ask questions about this project at any time.

If you have any questions or comments about the interview, please contact Helen Brown (208-885-0172 or helenb@uidaho.edu) at the University of Idaho. The University of Idaho Institutional Review Board has certified this project as Exempt.

In signing this consent form, you are giving your consent to participate in this interview and for the information you share to be used to inform DSMES/T programs in Idaho.

Please print your name

Please sign your name

Date

Name of Interviewer

Signature of Interviewer

Date

3. Script for Focus Group Recruitment

Letter for DSMES/T Program Coordinator (letter to come from IDHW).

1. Letter asking for help recruiting DSMES/T Listening Group Participants
2. DSMES/T Listening Group Recruiting Script

Dear _____,

Greetings and thank you for the role you play in providing education and self-management services for people with diabetes. We are working with evaluators (Helen Brown and associates) from the University of Idaho (UI) on a project called “Statewide Diabetes Self-Management and Education and Support/Training (DSMES/T) Assessment.” The UI team will seek information from DSMES/T program coordinators and DSMES/T participants to learn more about improving program participation, recruitment, and retention. This project is funded through the Centers for Disease Control and Prevention

We are reaching out to you in hopes that you can help us assemble a group of DSMES/T participants to engage in a 90 minutes focus group or “listening session.” We hope to conduct three listening groups from various parts of the state.

The goal of the listening session is to learn more about what positively or negatively impacts participation in DSMES/T programs. This information will help guide our efforts to improve DSMES/T program operations and coverage in the state. We will not ask participants any questions about their medical status, medical care or treatment.

To facilitate a listening session, we ask that you do the following:

1. Select a date, time, and location suitable for a 90-minute listening session. The UI evaluator, Helen Brown will work with program coordinator to identify times she is available and answer questions about the location and room needs.
2. At least 2-3 weeks in advance of the scheduled date, recruit 8-12 DSMES/T participants willing to take part in a 90-minute listening session (see the recruiting script below).

3. Send a reminder email or phone call to the listening group participants 2-3 days prior to the scheduled date.
4. Arrange to have the location and room available for the listening session and grant room access to the evaluator one hour prior to the listening session.

For your time and effort, the evaluator will contact you to offer diabetes education materials and resources that would be useful for your DSMES/T program.

Thank you for consideration of this request. Helen Brown will follow up with you to answer any questions you may have and to discuss the listening sessions further.

Thank you for all you do to promote diabetes education and self-management in Idaho.

DSMES/T Participant Focus Group (“Listening Session”) Recruitment Script

Hello, I am _____ (name) from _____ (DSMES/T program).

I am contacting you about a project called “Statewide Diabetes Self Management and Education and Support/Training (DSMES/T) Assessment. The goal of this project is to increase participation in the Idaho DSMES/T programs. I am calling you because you have participated in a DSMES/T program in the past.

The Centers for Disease Control and Prevention estimates that 10% of the adult population in Idaho has diabetes. Managing diabetes and preventing complications of the disease is important. Because of this, it is important to increase the number of people who receive diabetes education and learn to manage their diabetes.

We need your help to better understand what helps an individual to begin and complete a DSMES/T program. We need to learn what makes it easy or hard to get the help needed to learn about and manage diabetes. We will meet on _____ (date) at _____ (time), at _____ (location). The discussion will last 60 minutes, ending at _____ (time) At the end of the discussion, you will receive diabetes education resource for your participation.

The information gathered from this group discussion will help improve DSMES/T program practices. Anything you say or share in the listening session will be kept in strict confidence and you can refuse to participate at any time.

Your participation is very important to us. I am happy to answer any questions you have about this project. (answer questions, if any) Will you be able to join us for the discussion on _____ (date) at _____ (time)?

If yes, gather the following:

Name: _____

Phone: _____

or email: _____

Thank them for their time and let them know they will be contacted 1-2 days before the discussion.

If they are unable to participate, thank them for their time.

DSMES/T Program Coordinator Interview Tools and Resources

1. Interview Guide
2. Interview Consent Form
3. Script for Interview Recruitment (Letter to come from IDHW)

1. DSMES/T Program Coordinator Interview Guide

Statewide Diabetes Self-Management and Education and Support/Training (DSMES/T) Assessment

In-person and Remote Interview Guide

GREETING:

Thank you for talking with us today. We really appreciate you taking the time to be here with us and for your participation in this discussion.

- (Facilitator): My name is Helen Brown.
- (Notetaker): My name is Leah Severson, and we're from the University of Idaho in Moscow.

PURPOSE: 5 minutes

We are working with the Idaho Department of Health and Welfare, Division of Public Health, Diabetes, Heart Disease and Stroke Prevention program on the project called, Statewide Diabetes Self Management and Education and Support/Training (DSMES/T) Assessment.

We need your help to better understand what helps people to participate and complete a DSMES/T program. The Idaho Diabetes, Heart Disease and Stroke Prevention program is interested in your opinions about the DSMES/T program. Your shared experiences are important to help improve DSMES/T programs for people with diabetes. We are not going to ask you any questions related to the medical conditions, status, or history of the DSMES/T participants you serve.

Before we begin, we'd like to stress that our team will keep everything said here today confidential. What you say will be used only to help the Diabetes, Heart Disease and Stroke Prevention program to try to improve the quality of DSMES/T programs. Nothing you say will be connected with your name or the name of a specific DSMES/T program.

We have several things to talk about today, so I may need to change the subject or move ahead at times. Please feel free to stop me if you want to add a statement or if you have any questions. You may also bring up an important point or topic that we have not thought about asking. We welcome your ideas. Our discussion today will last about 60 minutes.

We will record the discussion we have today, and we will use this recording to share ideas with the Diabetes, Heart Disease and Stroke Prevention program to improve DSMES/T opportunities. When we write up what we have learned from you, we might use direct quotes from this discussion, but we will not identify you individually. Any quotes that we do use will not be linked to a person or to a specific program.

We have provided information on the Consent Form that describes the project and it includes our contact information and the contact information of the of Diabetes, Heart Disease and Stroke Prevention program. We welcome you to get in touch with us to answer any questions you have or to hear more ideas from you.

Please read the Consent Form we have provided for you. Once you read it, by signing the Consent Form you agree to participate in the conversation today. Your participation is completely voluntary; you are free to stop at any time. Please sign both copies, turn one into us, and keep the other for your records.

*For phone/online interviewees- they will receive the consent form in advance of the interview and will be asked to sign and return the form prior to the initiation of the interview.

Sign Consent Form

QUESTIONS

Part 1- Introduction to DSMES/T practice setting and operations- 25 minutes

1. Description of Services- Today, we are going to talk about the Diabetes self-management and education program, we will start by talking about a description of the DSMES/T services you render.

a) Can you tell us a bit about your role and the DSMES/T program you work with?

Probes

- How long have you been involved with the DSMES/T program?
- How many participants do you serve? What descriptors would you use to describe the participants you serve?
- What is the setting of the DSMES/T program? Hospital? Clinic? Primary care provider office? Other?
- How is the DSMES/T program organized? Individual sessions? Group sessions? A mix of both?
- Hours/days of operation?

b) **Staffing-** Please describe how your DSMES/T program is staffed.

Probes

- Staff numbers and functions, number of Certified Diabetes Educators.
- Staffing issues and/or challenges?
- Opportunities for professional development? CDE certification?
- Need for professional development? Please describe.

2. Program Participation and Capacity - Please describe a bit about participation in your DSMES/T program and the capacity of your program to offer DSMES/T services.

Probes

- Current program capacity- full, under subscribed, or wait listed? If so, how long?
- Program participation trends- times of year? Drop off/drop out trends?
- Factors that most impact capacity to serve participants?
 - Location, hours of operation, space, etc.?
 - Staffing patterns, lack of CDE professionals, staff with ability to communicate with non-English speakers? Peoples from other culture and customs outside the US mainstream?
 - Program reporting and tracking requirements? EHR availability & use?
- Other factors that enhance or limit capacity of the program?
 - Factors impacting the capacity to offer all DSMES/T program content areas?
 - Capacity areas of greatest concern?

3. Program Accreditation-Next we will discuss the American Diabetic Association (ADA) and the American Association of Diabetes Educators (AADE) accreditation standards, processes, and support.

a) In your opinion, what prevents/stops DSMES/T like programs from receiving accreditation?

Probes

- Utility?
- Fees?
- Inability to meet and/or support required CDE staffing?
- Inability to adequately recover program costs?

b) In your opinion, what support exists for the accreditation process? Are there areas that may need more support/knowledge and/or personnel to meet accreditation standards?

Probes

- Training needs?
- Sufficient supervision hours for those seeking to obtain CDE status?
- Geographical barriers? Rural/urban disparities?

Part 2- Opportunities and Challenges/Facilitators and Barriers to DSMES/T participation-30 minutes

4. Participation Opportunities- When it comes to program participation, retention, and completion, what is currently working well? Please tell us about DSMES/T program successes.

Probes

- Which groups of people enjoy the greatest participation and success in your program?
- What sort of adaptations/changes were necessary for this success to be possible?
- How has this success led to other program changes and/or desired program changes?

5. Participation Challenges – When it comes to program participation, retention and completion, what are some of the challenges you have encountered? In your opinion, what factors make it difficult for adults with diabetes to participate in and complete DSMES/T programs?

Probes

- Physical/Geographical factors such as lack of access due to distance? Transportation?
- Logistical factors such as program hours of operation, length of program?
- Financial considerations- lack of insurance and/or payment options? Other expenses associated with participation?
- Referral processes- support for DSMES/T from providers? Others?
- Outreach and marketing of the program? Outreach to diverse and at-risk populations?
- Personal factors of participants- Time? Family support? Age? Sex? Language and/or cultural factors influencing participation? Diabetes disease/control knowledge?
- Perceptions (of participants, family, medical professionals) about DSMES/T that limit participation? Stigma? Cultural relevance of the program? Fatalistic views about diabetes? Readiness to act?

6. Program referral, communication and outreach systems

a) What is working well, or not well, when it comes to referrals for DSMES/T services?

Probes

- Who are the main referral sources? Primary care providers (MD/DOs, FNPs, PAs, etc.).
- Other referral sources- self referral? Other organizations?
- Referral challenges based on attitudes, perceptions, relationship building?

b) What is working well or not so well when it comes to communication between health care providers, participants, and DSMES/T program staff?

Probes

- Communication systems in place- frequency? Mode? Methods?

c) What is working well or not so well when it comes to program outreach efforts?

- Current outreach methods? Websites? Fliers? Facebook? Direct contact?
- Potential outreach factors- time, money, personnel, diversity among staff?

7. DSMES/T Financial/Billing Opportunities and Challenges Impacting Participation Next we will talk about financial considerations of the DSMES/T program. First, please describe what has worked well that enhances DSMES/T program participation, and what are the financial challenges you face?

Probes- Opportunities

- Processes and structures in place that have worked well?
- Protocols or plans in place for uninsured individuals?
- Administrative support for the DSMES/T program?

Probes- Challenges

- Payment issues and difference between insurance, Medicaid, Medicare, etc.?
- DSMES/T service coding, billing and payment issues?
- Lack of administrative support?

8. Training, Professional Development and Resource Opportunities-Last, we will talk about training and professional development opportunities that you believe could increase DSMES/T program participation, retention, and completion.

a) In your opinion, what are training and professional development the state Diabetes Program could offer or support to increase program participation and retention?

Probes

- Provider outreach and communication strategies?
- Program logistics- billing, coding, reporting
- Financial support for CDE accreditation for programs? Professionals?
- Outreach to at risk and diverse participants?

b) In your opinion, what are some tools and resources the Diabetes Program could offer or support to increase program participation and retention?

Probes

- Support for materials development? Examples?
- Purchase of materials? Such as?

9. Is there anything else you would like to add about increasing DSMES/T program participation, retention and completion?

Thank you for your time and your thoughtful participation today.

2. DSMES/T Program Coordinator Consent Form- (In-person and Remote)

Statewide Diabetes Self-Management and Education and Support/ Training (DSMES/T) Assessment

Consent Form- DSMES/T Program Coordinator Interview

We have asked you to participate in an interview supported by the Diabetes, Heart Disease and Stroke Prevention, Division of Public Health, Idaho Department of Health and Welfare. The overall goal of this project is to increase the number of Idahoans with diabetes that participate in DSMES/T programs. This effort is funded by the Centers for Disease Control and Prevention (CDC). The information from this interview will be used by the Diabetes program to help DSMES/T programs serve people with diabetes even better.

This interview will last approximately 60 minutes.

There are no anticipated risks involved in participating in this interview. All interviewees will receive a DSMES/T related diabetes education resource for their participation.

With your permission, this interview will be audio recorded to help us better understand what you share with us. We will keep your responses confidential and will not use your name in any written reports. We might use direct quotes from this discussion, but we will not identify you individually. Any quotes that we use will not be linked to a person or to a DSMES/T program.

The information provided in this interview will be compiled with other data and information from DSMES/T program coordinator and reported to the Idaho Department of Health and Welfare. No individual or DSMES/T program will ever be identified by name in any written reports. Once the interview has been transcribed the recording will be deleted.

Your participation in this interview is completely voluntary. If you prefer not to answer a particular question, that is fine. You can pass. You may stop participating in the interview at any point. Please ask questions about this project at any time.

If you have any questions or comments about the interview, please contact Helen Brown (208-885-0172 or helenb@uidaho.edu) at the University of Idaho. The University of Idaho Institutional Review Board has certified this project as Exempt.

In signing this consent form, you are giving your consent to participate in this interview and for the information you share to be used to inform DSMES/T programs in Idaho.

Please print your name

Please sign your name

Date

Name of Interviewer

Signature of Interviewer

Date

3. Scripts for Interview Recruitment (In-person and Remote)

Recruiting letter for DSMES/T Program Coordinator Interviews- Face-to Face

Dear _____

We are reaching out to you and all of the Diabetes Self-Management and Education and Support/Training (DSMES/T) program coordinator in Idaho with information about a new project called “Statewide Diabetes Self Management and Education and Support/Training (DSMES/T) Assessment.” The goal of this project is to collect information from DSMES/T program coordinator and DSMES/T program participants to improve participation in Idaho DSMES/T programs. We are working with a University of Idaho evaluator, Helen Brown, to complete this project.

We need your help to better understand what helps adults with diabetes begin and complete a DSMES/T program and are writing to see if you would consider participating in a 60-minute face-to-face interview with the project evaluator. Helen will contact you to arrange for a date, time and location convenient for you. The information you share will be kept strictly confidential and all interviewees will receive a DSMES/T related educational resource for their participation and a copy of the project findings.

Your participation is very important to us. Please expect Helen Brown to reach out to you in the next two weeks to arrange a date and time for an interview.

I am happy to answer any questions you have about this project. Please find information for the project evaluator below:

Helen Brown, RDN, MPN
Associate Clinical Professor
Movement Sciences, University of Idaho
helenb@uidaho.edu
208-885-0172.

Sincerely,

Kelsey Hofacer
Health Program Manager
Diabetes, Heart Disease and Stroke Prevention
Division of Public Health
Idaho Department of Health and Welfare
Kelsey.hofacer@dhw.idaho.gov

Recruiting letter for DSMES/T Program Coordinator Interviews- Remote

Dear _____ -

We are reaching out to you and all of the Diabetes Self-Management and Education and Support/Training (DSMES/T) program coordinator in Idaho with information about a new project called “Statewide Diabetes Self-Management and Education and Support/Training (DSMES/T) Assessment.” The goal of this project is to collect information from DSMES/T program coordinator and DSMES/T program participants to improve participation in Idaho DSMES/T programs. We are working with a University of Idaho evaluator, Helen Brown, to complete this project.

We need your help to better understand what helps adults with diabetes begin and complete a DSMES/T program and are writing to see if you would consider participating in a 60-minute phone or on-line interview with the project evaluator. Helen will contact you to arrange for date and time convenient for you. The information you share will be kept strictly confidential and all interviewees will receive a DSMES/T related educational resource for their participation and a copy of the project findings.

Your participation is very important to us. Please expect Helen Brown to reach out to you in the next two weeks to arrange a date and time for an interview.

I am happy to answer any questions you have about this project. Please find information for the project evaluator below:

Helen Brown, RDN, MPN
Associate Clinical Professor
Movement Sciences, University of Idaho
helenb@uidaho.edu
208-885-0172.

Sincerely,

Kelsey Hofacer
Health Program Manager
Diabetes, Heart Disease and Stroke Prevention
Division of Public Health
Idaho Department of Health and Welfare
Kelsey.hofacer@dhw.idaho.gov

Appendix 2

DSMES/T Sites Interviewed

Site	DSMES/T Recognition
Bonner General Hospital - Sandpoint, ID	ADA
Clearwater Valley Hospital - Orofino, ID	AADE
Eastern Idaho Regional Medical Center - Idaho Falls, ID	No longer accredited
Gritman Medical Center - Moscow, ID	ADA
Intermountain Cassia Regional Medical Center - Burely, ID	ADA
Kootenai Health Clinic - Coeur d'Alene, ID	ADA
North Canyon Medical Center - Gooding, ID	ADA
Portneuf Medical Center - Pocatello, ID	ADA
Rocky Mountain Health and Wellness Clinic - Eagle, ID	ADA
Shoshone Family Medical Center - Shoshone, ID	ADA
Southwest District Health - Caldwell, ID	AADE
St. Alphonsus - Boise/Caldwell, ID	AADE
St. Lukes - Meridian, ID	ADA