Introduction
Diabetes Self-Management Education and Support (DSMES) is the ongoing process of facilitating the knowledge, skills, and ability necessary for diabetes self-care. DSMES is critical for all people with diabetes, with research demonstrating that participation in DSMES leads to improved clinical outcomes and quality of life. In 2017 the National DSMES Standards Revision Task Force reviewed and updated the standards as summarized in Table 1. The standards are applicable to education and support services provided in a variety of settings in rapidly evolving care and payment models including population health management approaches embedded at the point of care.

Evidence for a Technology-Enabled DSMES Framework
Recognizing that <5% of eligible participants currently access DSMES, the revised standards recommend incorporating technology and integrating DSMES with medical management to improve access, clinical outcomes, and cost effectiveness. A recent systematic review found that technology-enabled diabetes self-management solutions significantly improve A1c. The most effective interventions incorporated all the components of a technology-enabled self-management (TES) feedback loop that (1) connects people with diabetes and their health care team using 2-way communication, (2) analyzes patient-generated health data (PGHD), and provides 3) tailored education, and 4) individualized feedback (Figure 1).

Digital Health Learning Network
In 2017, the AACE Digital Health Learning Network was formed to explore how to integrate evidence-based digital health into the practice of diabetes education and care. The technology-enabled Population Health Diabetes Education and Care approach was defined in accordance with the TES framework including:

- Self-Management Education & Support is provided to an identified population through evidence-based technology delivered solutions supplemented by the right level of human touchpoint.
- Care Plan Optimization: A defined process for viewing, evaluating and communicating patient-generated health data for shared decision making is used.
- Practice improvement: Extends the reach, effectiveness, and efficiency of the care team with the diabetes education educator serving as the leader facilitating the pivot from:
  - Structured programs & planned visits to data-driven encounters
  - Checklists to outcomes tracking
  - Transaction based reimbursement to value-based payment

The 2018 American Diabetes Association (ADA) Standards of Medical Care, lifestyle section, acknowledged the importance of technology-enabled solutions to deliver education and care.


digital health tool

Figure 1 TECHNOLOGY-ENABLED SELF-MANAGEMENT FEEDBACK LOOP (TES)

Conclusions
The confluence of the accelerating movement to population management (value-based payment and care models) with the major impact technology is making on health care is creating a golden opportunity to transform care. Nowhere is that more needed than in diabetes. The diabetes educator is uniquely skilled to lead health care teams in providing evidence-based technology-enabled population-health diabetes self-management care and education.

References