DSMES Curriculum Design: Connecting the Dots

WEBINAR FOR DEAP QUALITY COORDINATORS
MARCH 19, 2019
1.0 CEU
Presenters

Barb Schreiner
PhD, APRN, CDE, BC-ADM
Member, AADE Board of Directors

Carole’ Mensing
RN, MA, CDE, FAADE
Consultant

Jodi Lavin-Tompkins
MSN, RN, CDE, BC-ADM
Director of Accreditation
Learning Objectives

1. Describe the essential components of a curriculum tailored to the demographic and cultural needs of the target population and practice environment.

2. Describe the content design, delivery options of an evidence-based curriculum.

3. Describe how to integrate the new content areas from the 2017 national DSMES standards into current curriculum.

4. State resources available and outline the next steps.
Welcome and Introduction

• Why talk about curriculum?
• Stories from the field-DEAP

<table>
<thead>
<tr>
<th>National Standard</th>
<th>Essential Highlights</th>
<th>Interpretive Guidance</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard 6: Curriculum</strong></td>
<td>The curriculum is the evidence-based foundation from which the appropriate content is drawn to build an individualized education plan based on each participant’s concerns and needs. The following core content areas demonstrate successful outcomes and must be reviewed to determine which are applicable to the participant: - preventing, detecting and treating chronic complications; (including immunizations and preventive eye, foot, dental, and renal examinations as indicated per the individual participant’s duration of diabetes and health status), healthy coping with psychosocial issues and concerns, problem solving. The curriculum must be supplemented with appropriate resources and supporting educational materials and must be dynamic. It is crucial that the content be tailored to match individual’s needs and be adapted as necessary for age, developmental stage, type of diabetes, cultural factors, health literacy and numeracy, and comorbidities.</td>
<td>Standard six specifies the type of curriculum and how it will be utilized to meet the participants’ needs. Curriculum Adaptation of the curriculum must also take into account learning style preferences and may involve practical problem-solving approaches. Creative, patient-centered, experience-based delivery methods—beyond the mere acquisition of knowledge—are effective for supporting informed decision-making and meaningful behavior change and addressing psychosocial concerns. Approaches to education that are interactive and patient-centered have been shown to be most effective. An education plan based on the individual assessment will determine which elements of the curriculum are required for each participant. <strong>Core Content Areas</strong> (Type 1 &amp; 2, GDM, secondary, pregnancy complicated by diabetes) in the following topic areas: - Pathophysiology and treatment options - Healthy eating - Physical activity - Medication usage - Monitoring, including pattern management - Preventing, detecting and treating acute (hypo/hyper, DKA, sick days, severe weather or crisis supply management) and chronic complications (immunizations, eye, foot, dental, exams and kidney function testing as indicated) - Healthy coping - Problem solving</td>
<td>19. Documentation of an evidence-based curriculum that is reviewed at least annually and updated as appropriate to reflect current evidence, practice guidelines and cultural appropriateness. (see Interpretive Guidance for core content areas). □ YES □ NO □</td>
</tr>
</tbody>
</table>

**STANDARD 6 Curriculum**

The components of this standard include:

1. Documentation (such as a picture of the cover of a published curriculum) of an evidence-based curriculum including title, publication date
   a. If not a purchased publication, must have references to reflect current evidence and practice guidelines, and cultural appropriateness for population served
   b. Content of curriculum should cover the following areas at a minimum:
      i. Pathophysiology and treatment options
      ii. Healthy eating
      iii. Physical activity
      iv. Medication usage
      v. Monitoring, including pattern management
      vi. Preventing, detecting, and treating acute complications
         1. Hypoglycemia
         2. Hyperglycemia
         3. DKA
         4. Sick days
         5. Severe weather or crisis supply management
      vii. Preventing, detecting, and treating chronic complications
         1. Immunizations
         2. Eye
         3. Foot
         4. Dental
         5. Kidneys
   c. Healthy coping
   d. Problem solving:

2. Policy regarding how the curriculum:
   a. will be used/adapted to learning style preferences and patient-centered experience-based delivery
   b. Will be delivered based on the individual assessment and education plan that is collaboratively developed with the participant
   c. Will be tailored to match an individual’s age, developmental stage, type of diabetes, culture, health literacy and numeracy, and comorbidities
   d. Will be supplemented with appropriate resources and supporting educational materials that are dynamic (are updated on an ongoing basis)
Essential Components of a Curriculum
Carole’ Mensing
Curriculum

• A written curriculum--AKA: A substitute teacher’s plan

• Measurable learning goals*

• Reflects current practice, evidence-based

• A written set of lesson plans, guiding instructors

• Delivery of consistent information

*Std 6- NSDSMES- 2017
Some (deep) thoughts about Curriculums

It’s… a framework- the content remains the same, the teacher/instructor style and examples may vary

It’s not… Paper work- becomes a reference for the team

Supplement with resources- be “DYNAMIC”

“Patient/person centered”

DEAP- Interpretive Guidance tool

Reference: Standard 6, NSDSMES
Examples of standardized Curriculums

AADE:

ADA:

IDC:

Conversation Maps:

Pink Panther:

Also eBook version
Poll Q # 1

Identify the primary curriculum in use at your organization

Select all that apply

A) AADE

B) ADA

C) IDC

D) Conversation Maps

E) Pink Panther

F) Created our own

G) Other...
What makes these work?

- Adapted
- Adopted

- Target population, specialty needs, ages
- Languages, economics
- Culturally appropriate, language appropriate
- Instructor capabilities, preferences, etc.

Ref: Mensing, Norris
Assessment

• Target population
  – Published Population health data
  – Community needs
  – Your Target Population

• Practice environment
  – Local standards

• Individual
  - Preferences, previous knowledge
  - Medical regime, availability, etc.
Assessment: Health Literacy-Screening Questions

• How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy?
  • Never
  • Sometimes
  • Always

• How confident are you filling out medical forms by yourself?
  • Not at all
  • A little confident
  • Confident

Powers BJ, Trinh JV, & Bosworth HB. JAMA. 2010; 304(1);76-84
Assessing Health Literacy

  - Helen Osborne, Jones & Bartlett Learning, Burlington, MA, 2011
  - Weiss B; AMA Foundation and American Medical Association
- *Physician ToolKit: A Resource for Implementing Cross-Cultural Clinical Practice Guidelines*
  - UMASS, MassHealth; March 2004
- *Assessing the Nation’s Health Literacy*
  - AMA Foundation, 2008
Assessment: Distress, vs clinical Depression

1. Assumes a normal reaction to diabetes vs. psychiatric disorder
2. Implies etiology defined by the context of diabetes vs. presence of symptoms irrespective of cause
3. Focuses on the source of distress vs. classifying symptoms
4. Emphasizes content-related, specific interventions vs. collection of symptoms irrespective of treatment
Educational Plan

**Assessment** - health, style, literacy, history of diabetes, information interest, age, clinical management, etc.

**Intervention** - plan, develop, implement, based on clinical management, educational needs
ex: Attend full education program, focus on.... Complete insulin Initiation Series, etc.....

**Reassess** - progress, achievement, next steps

**Continued** Support Plan - current status, follow up in community, etc......
In Summary: Curriculum/teaching plans

- Curriculum / teaching plans
  - Elements of a curriculum
    - Content
    - Methods
    - Recommended instructor tips, demos
  - Purpose of teaching plans
    - Continuity across instructors
    - Road map for “substitute teachers”
Content Design and Updates
Barb Schreiner
Poll Q #2

How do you keep up with curriculum changes?

Select all that apply

a) Planned review each year
b) Advisory committee participates
c) Instructors do update
d) Coordinator completes update
e) Incorporate ADA standards each year
f) Update when medical director advises
Model for curriculum design

- Target population
  - Demographic
  - Cultural

- Standardized, commercial curriculum
- Customized curriculum
  - addresses population needs
  - updated to standards of care
- Original (home grown) curriculum
  - evidence-based

- Assessment
  - (Standard #3)
- Program objectives
- Practice environment
  - Local standards

- Program level
  - Standardized, commercial curriculum
  - Customized curriculum
    - addresses population needs
    - updated to standards of care

- Patient level
  - Individualized patient assessment
    - (Standard #7)
  - Individualized patient teaching plans
  - Individualized learning objectives
  - Individualized goal setting

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Adapting a standardized curriculum

• It is all about linkages
• Content based on assessment
• Culturally appropriate based on target population
• Language appropriate based on target population
Elements of a curriculum

• Reflects current evidence and practice guidelines
• Aligned with community and population needs
• Aligned to program objectives
• Includes:
  – Content
  – Teaching strategies and methods
  – Appropriate learning resources
  – Outcome evaluation
Implementing the curriculum

• Instructors
• Content
  – Pathophysiology and treatment options
  – Healthy eating
  – Physical activity
  – Medication
  – Monitoring
  – Risk reduction
  – Healthy coping
  – Problem solving

• Approaches and teaching tools
  – Problem-solving approaches
  – Patient-centric
  – Active learning

Keeping curriculum current

• What?
  – All elements of curriculum: content, approaches, evaluation measures

• Why?
  – Rapidly evolving diabetes care
  – Patients are ‘self educating’

• When?
  – At least review annually

• How?
  – Credible sources
  – Engage stakeholders and experts
QI and your curriculum

Effective Program

- Participant Needs
- Objectives
- Time & Place
- Right People
- Effective Instructor
- Effective Teaching
- Accomplish Objectives
- Program Outcomes
- Participant Outcomes

SUMMATIVE

FORMATIVE

QI and your curriculum
Why evaluate programs?

• Assure goals are being met
• Assure process is working
  – efficient, effective, quality
• Answer interesting questions about
  – Patients and Staff/educators
  – Processes and Business/financial
• Describe program to interested parties
• Meet accreditation requirements
• Predict future performance
## Using results

<table>
<thead>
<tr>
<th>Individual</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the person change his or her exercise habits?</td>
<td>What % people who chose physical activity as a goal?</td>
</tr>
<tr>
<td>Did the person meet his or her A1c target in 6 months?</td>
<td>What % people met the ADA A1c target in 6 months?</td>
</tr>
<tr>
<td>How many times has the person missed an appointment?</td>
<td>What is the monthly ‘no show’ rate for the center?</td>
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Program Evaluation tool

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*American Association of Diabetes Educators*
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<tr>
<td>How many patients are achieving their clinical goals following the program?</td>
<td>40% of patients will have a decrease in A1c 6 months after the program</td>
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## Program Evaluation Tool: Operational

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<tr>
<td>How effective is my program in addressing customer service?</td>
<td>Shorten waiting time for an appointment by 20%</td>
<td></td>
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Quality improvement & your curriculum

• Isolate a QI question
  – Reasonable
  – Measurable
  – Meaningful

• Collect outcome data
  – Sources and resources
  – Consider time

• Know how to handle the data
  – Descriptive statistics
  – Consider what resonates with stakeholders
Poll Q #3

Which topics do you have in your curriculum?  
*Select all that apply*

A) Immunizations  
B) Navigating the health care system  
C) Self-advocacy  
D) Patient-generated health data  
E) Disaster planning and preparation
What’s new in 2019?

• Immunizations
• Navigating the health care system ¹
• Self-advocacy ¹
• Patient-generated health data
• Disaster planning and preparation

# Adding new content to curriculum

<table>
<thead>
<tr>
<th>Topic</th>
<th>Content</th>
<th>Time</th>
<th>Instructor/Method</th>
<th>Evaluation/Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing risk: Immunizations$^2$</td>
<td>• Reliable sources for immunization recommendations$^1$</td>
<td>10-15 min.</td>
<td>Primary instructor: Back-up instructors:</td>
<td>• Person determines which immunizations are complete, needed</td>
</tr>
<tr>
<td></td>
<td>• Current routine, and new immunization recommendations from CDC.</td>
<td></td>
<td>Methods:</td>
<td>• Person completes PCP/Pharmacy checklist</td>
</tr>
<tr>
<td></td>
<td>• Pros and cons of immunization therapy.</td>
<td></td>
<td>Discussion</td>
<td>• Person determines when to schedule follow up as needed.</td>
</tr>
<tr>
<td></td>
<td>• Potential SE, and treatment</td>
<td></td>
<td>Q and A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Handout: CDC recommended adult vaccines</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Handout: Personal checklist of immunizations</td>
<td></td>
</tr>
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</table>

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**References**

How to document evidence-based content

• Use credible, reliable, current sources, current guidelines
  – ADA 2019 Standards of Medical Care for diabetes, AACE, Endocrine Society, Academy of Nutrition and Dietetics
  – Joslin Diabetes Center, Medscape, Up-to-Date
  – Peer-reviewed journals and books, position papers

• Document updates to curriculum
  – Advisory committee minutes
  – Meeting notes

• Reference curriculum content to current evidence
  – Example: Footnotes within curriculum and comprehensive reference list
Navigating healthcare system/ Self-advocacy

- Health literacy
- Communication
- Personal health history
Health literacy

• Obtain, process, and understand health information and services
• Dependent on:
  – Communication skills and knowledge of health topics
  – Culture
  – System and situation demands

• Health literacy affects people’s ability to navigate healthcare system
  – Filling out complex forms
  – Locating services
  – Collaborating
  – Sharing personal information
  – Engaging in self-care
  – Understanding math concepts
    • Probability and risk
    • Test results

Health Literate Care Model

• Informed, health literate, activated patient and family
  – In a health literate care system, patients and their families have the knowledge and skills they need to:
    • Make informed decisions to maximize their health and well-being
    • Provide feedback that helps health care systems respond effectively to their evolving needs

Health Literate Care Model

• Prepared, proactive, health literate health care team
  – Follow “health literacy universal precautions”
  – Approach all people with the assumption that they are at risk of not understanding their health conditions or how to deal with them
  – Confirm and ensure understanding

Health literacy and DSMES

- Limit the number of messages
- Use plain language
- Focus on action
- Check for understanding
- Improve usability of health forms
- Focus on problem solving and shared decision making
Patient-generated health data (PGHD)

- Collected by patients/individuals
- Outside clinical setting
- Examples
  - Patient portals
  - Health trackers and devices
  - Medication trackers

PGHD: Issues to be solved

PGHD and the DSMES curriculum

- Participant will demonstrate accurate use of____
- Participant will describe how best to share monitoring results with diabetes team.

Disaster planning resources

mydiabetesemergencyplan.com
diabetesdisasterresponse.org
Disaster planning & DSMES curriculum

• Participant will describe details about planning for weather or other emergency.
• Participant will select location to post emergency check list.
• Participant will add weather alert app to smart phone.

https://www.diabeteseducator.org/living-with-diabetes/disaster-preparedness
In Closing…

Carole’ Mensing
Action Plan

• What is your key takeaway from this session?

• What is one thing you can do tomorrow to update your curriculum?

• Don’t forget to review with your stakeholders!
Other AADE Resources

• The Art & Science of Diabetes Self-Management Education Desk Reference
• Diabetes Advanced Network Access (DANA)
• The Diabetes Educator Journal
• AADE in Practice journal
• Joint Position Statement toolkit
• AADE Position Statements and Practice Papers
• https://www.diabeteseducator.org/living-with-diabetes/disaster-preparedness
• https://www.diabeteseducator.org/living-with-diabetes/vaccine-resources

New DEAP website - Check it out!
Thank You!