Review Guide for the Certified Diabetes Educator® Exam

Fourth Edition

Contributors

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# Table of Contents

*Preface* ................................................................. v

**Section 1:** Exam Prep .................................................. 1
**Section 2:** Self-Assessment Tests .................................... 7
**Section 3:** Practice Exams ........................................... 21
**Section 4:** Answer Key ................................................ 111
Preface

Whether sitting for your first certified diabetes educator® (CDE®) exam or renewing your credential, the Review Guide for the Certified Diabetes Educator® Exam is your key study tool. The fourth edition is designed to help you assess your proficiency in the exam content areas.

The Guide begins by presenting strategies for preparing for and taking the exam. Next are three self-assessment tests based on the three content sections of the exam: Assessment of Diabetes and Prediabetes, Interventions for Diabetes and Prediabetes, and Disease Management. Complete these self-assessment tests to gauge the content areas for which you may require additional study.

The two, 200-multiple-choice-question exams replicate the experience of exam day. The questions are random and address topics from all three content areas.

An answer key for the self-assessments and the two practice exams provides the correct answer as well as an answer rationale for each of the more than 450 multiple-choice questions in the Guide.

Since eligibility requirements for the CDE examination change over time, the American Association of Diabetes Educators (AADE) strongly encourages you to check the website of the National Certification Board for Diabetes Educators (NCBDE, http://www.ncbde.org) for the most current eligibility requirements and the most current Certification Handbook for Diabetes Educators.

The NCBDE does not endorse, financially benefit from, or participate in the development of this exam review guide.
Exam Prep
Strategies for Success

While studying is a critical part of getting good results on an exam, being adept at taking the test is also crucial. Fortunately, there are skills and techniques you can learn to help ensure test-taking success. These involve strategies for preparing for the exam, combating test anxiety, and learning how to assess each exam question.

First Things First: Know Yourself

In preparing for the exam, you will be most productive if you are aware of your study preferences, learning style, and daily functioning cycle. Having this knowledge of yourself will enable you to develop and engage in an effective study plan.

Start by identifying your best time of day. Are you a morning, afternoon, or evening person? Pinpoint your optimal time to devote to studying. When do you have the most time to devote to uninterrupted study: mornings, lunch hours, late evenings, weekdays or weekends?

Next, determine your learning preferences. Do you learn best working solo or in a group? Consider organizing a study group of other examinees if you learn well in a group setting. Be sure that you are studying in the environment that matches your own needs. This includes accommodating your physical space preference as well as understanding how much noise and distraction you can or cannot tolerate when you study.
What to Expect: About the Exam

The CDE® Examination is composed of 200 multiple-choice, objective questions. You will have a total testing time of four (4) hours. The examination is based on a content outline developed from a job analysis completed in 2013 that surveyed diabetes educators about the tasks they performed. Questions on the examination are linked directly to a task or tasks. As a result, each question is designed to test your knowledge necessary to perform the task or your ability to apply it to a job situation.

The NCBDE website includes a video on the computer-based testing procedures. Be sure to review it so you are familiar with what will occur on the day of your exam.

Changes and advances in medical treatment, diagnostic criteria, clinical guidelines, pharmaceuticals, and medical devices can occur at any point during a given year. Be sure to keep current as part of your study plan. The NCBDE recognizes that the dissemination of the information on advances may occur at different rates, depending on where you live. To address this disparity, the NCBDE developed the following policies:

♦ New medical advances, guidelines, or pharmaceuticals that impact diabetes self-management education and/or treatment of diabetes will be included in the Certification Examination for Diabetes Educators no sooner than one year after the information is released.
♦ New diagnostic criteria or specific guidelines that impact diabetes self-management education and/or treatment of diabetes that are released nationally and identified as effective immediately may be included in the examination at any time.

Getting Organized: Essential to Test Preparation

You will be better equipped to take the exam if you organize your preparation and sharpen your study skills:

♦ Allow ample time in advance of the test to study. Don’t wait until the last minute.
♦ Review the Certification Handbook for Diabetes Educators.
♦ Draw up a time line for studying. Be realistic rather than overly ambitious.
♦ Develop a study plan based on the Content Outline in the Handbook. Use this as a guide for organizing your study time. Prioritize the content according to your strengths and weaknesses.
♦ Maintain consistency in following your study plan. However, be flexible when you need to be.
♦ Study in short and focused sessions. Be sure to take breaks.
Prepare Mentally, Physically, and Emotionally

Test preparation involves three components: mental, physical, and emotional preparedness.

To be mentally prepared, you need to learn and review all the material that will be covered. Review the Certification Handbook for Diabetes Educators so you are clear about the exam in terms of types of questions—the CDE® exam is multiple choice—time restrictions, and scoring (ie, how guessing and incorrect answers are scored).

In preparing physically to take the exam, be sure to follow healthful habits. This includes a nutritious diet, regular exercise, and adequate rest and sleep throughout the pre-test period. If you find it difficult to manage stress and have trouble winding down, practice yoga, muscle relaxation strategies, or rhythmic breathing.

Preparing emotionally for the test requires adopting a positive attitude, avoiding excessive worry, and bolstering your confidence. Because attitude often becomes a self-fulfilling prophecy, techniques such as positive imaging and positive self-talk can be vital during the period leading up to the exam. To promote a healthy frame of mind, create a mental image of yourself taking the test with confidence and performing very well. Envision the benefits that you will derive from obtaining the Certified Diabetes Educator® (CDE®) credential.

Exam Day: Focus on Assessing Each Test Item

When you sit down to take the exam, assess each test item. Start by determining the question type. Multiple-choice exam questions tend to fall into three categories:

1. Recall
2. Application
3. Analysis

Recall questions. This type of question is asking you to remember facts, terminology, procedures, processes, definitions, and important principles. Identifying the current clinical guidelines for a diagnosis of diabetes and selecting the correct definition of the DAWN effect are examples of recall questions.

Application questions. More complex than a recall question, an application question tends to provide a set of variables or a scenario. You are expected to demonstrate your ability to apply the information and suggest the next step in the process or the best way to resolve the problem. An example of an application question is a scenario that asks you to adjust the food intake for the patient described in the scenario.

Analysis questions. These questions require more complex-level problem solving. A hypothetical situation is posed and you will need to synthesize the information and make judgments to determine which answer choice is the best or most appropriate response. An example of an analysis question is a scenario that ends with the question “What is the most likely reason for her elevated A1C level?”
Based on the information provided in the rest of the scenario, you will need to analyze the situation and make a determination.

Next, consider the anatomy of the question. The stem of a test item identifies the specific question or intent, and may also contain background information. The options or distractors in a test item provide a list of possible answers.

In working a test item, keep these basic tips in mind:

♦ Find the key words or phrases in the stem of the question.
♦ Eliminate obvious wrong answers in the options.
♦ Narrow your choices and select the best option.

Following are five examples of the steps involved in assessing a test item:

♦ Example 1. Type of Question: Analysis
   
   A 50-year-old man has recently developed diabetes. During the first education session, his wife frequently asks questions, often interrupting the educator’s discussion with questions that are unrelated to the topic being taught. What is the educator’s best option for managing this situation?

   A. Answer the questions and resume the planned course of instruction
   B. Discourage questions until the end of the class
   C. Allow several minutes for questions, then teach the topic of most concern to the husband and wife
   D. Remind the learners that there are important topics still to learn in a limited amount of time

   **Assess the stem:** Find the important words or phrases: “recently developed diabetes,” “interrupting,” “unrelated,” and “educator’s best action.”

   **Assess the options:** Narrow the reasonable choices to two. Eliminate whatever does not make sense (options B and D). Think about what teaching/learning concepts apply to this case.

   **Best answer:** Option C.

♦ Example 2. Type of Question: Analysis
   
   The educator’s best interpretation of the wife’s behavior is that she

   A. is anxious about the anticipated lifestyle change.
   B. has a slow learning style.
   C. is dealing with denial and depression.
   D. has poor listening and comprehensive skills.
Assess the stem: Find the important words or phrases: “best interpretation.”

Assess the options: Narrow the reasonable choices to two. Eliminate whatever does not make sense. Options B, C, and D might be true, but not enough information is provided. (Experienced educators often try to “read between the lines” or overanalyze the stem.) Think about what psychosocial concepts apply to this case.

Best answer: Option A.

Example 3. Type of Question: Application

A patient reports that instead of taking her usual morning dose of insulin, she mistakenly took an extra 10 units of regular insulin. The educator would expect her blood glucose to

A. decrease in 2 to 3 hours.
B. increase in 6 to 8 hours.
C. increase in 2 to 3 hours.
D. decrease in 6 to 8 hours.

Assess the stem: Find the important words or phrases: “morning dose,” “extra units of regular,” and “expect blood glucose to.”

Assess the options: Eliminate any answer that does not make sense, which includes any answer that says the blood glucose will increase (options B and C). Decide which of the remaining two answers is the best choice.

Best answer: Option A.

Example 4. Type of Question: Recall

Necrobiosis lipoidica diabeticum typically occurs on the patient’s

A. shins.
B. thighs.
C. elbows.
D. back.

Assess the stem: This is an example of an item in which the educator may have no idea what the question is. Analyze each word in the stem.

Assess the options: Look for similarities among the choices, because often options are written to test the ability to differentiate similarities. Shins and thighs have something in common because they are both on the leg. Therefore, cross off options C and D. Take your best guess with options A and B. In this case, it may be that the best you can do is narrow your choice to a 50-50 selection.
Best answer: Option A

♦ Example 5. Type of Question: Recall
A common symptom of cardiovascular autonomic neuropathy is
A. a fixed heart rate.
B. tachycardia with exercise.
C. headaches.
D. burning and numbness in feet.

Assess the stem: Note the important words or phrases: “cardiovascular,” “autonomic,” and “neuropathy.” Think of related terms: heart/autonomic nervous system/complication.

Assess the options: Analyze each option. Option A: This could be bad if someone’s pulse doesn’t ever change (could be the answer as it is related to the heart and nerves responsible for rate). Option B: This is okay, since you do want the heart to beat faster with exercise; eliminate this option. Option C: Probably not related to the heart; eliminate this option. Option D: These are signs of peripheral neuropathy but not autonomic neuropathy; eliminate this option.

Best answer: Option A

Final Tips
Finally, keep these common exam pitfalls in mind as you take your exam:

♦ Read each question and all answer choices carefully. Be sure to catch important qualifiers, like “always,” “never,” “most,” “least,” and “typical,” and the specific characteristics provided about the person in the question (eg, age, type of diabetes, comorbidities, medications).

♦ Avoid overthinking. Don’t make assumptions that aren’t supported by the question. Do not read more information into the question than is actually stated. Respond to the question as written.

♦ Don’t become distracted because you think an entirely different answer choice that is not provided would be a better response to the question. One of the answer choices provided is the correct response.

♦ Don’t look for patterns or sequences in the correct answer choices. For example, do not assume that “C” can’t be the correct answer choice for three questions in a row. It can.

♦ Avoid wasting too much time on a few questions. You want to complete the entire exam.
Assessment of Diabetes and Prediabetes

1. A diabetes educator is consulted to provide discharge education for an 18-year-old patient diagnosed with type 1 diabetes. Upon entering the hospital room, the educator finds the patient quietly sobbing. The patient states that she is sad and anxious about her new diagnosis. Before the patient leaves for home today, which of the following should the educator review with the patient?
   A. Signs and symptoms of hypoglycemia and appropriate treatment
   B. Epidemiology of diabetes and the incidence of depression
   C. Incidence of birth defects associated with hyperglycemia
   D. Lifestyle modifications and carbohydrate counting

2. A 22-year-old patient with type 1 diabetes comes to the diabetes educator for additional education prior to starting on an insulin pump. During the visit, his cellular telephone rings, indicating a text message. Later, when trying to schedule a follow-up visit, the patient lays several other electronic devices on the counter while looking for his personal digital assistant (PDA). Which of the following is the best way to tailor future educational interventions with this patient?
   A. Schedule education sessions in the morning to avoid text message interruptions
   B. Offer online education for the patient to practice carbohydrate counting
   C. Politely ask the patient to leave his cell phone at home
   D. Enroll the patient in a group education class of patients with type 1 diabetes
Section 2: Self-Assessment Tests

Assessment of Diabetes and Prediabetes

1. **A.** Initial teaching should focus on survival level skills that the newly diagnosed patient would need to safely manage her disease upon discharge, i.e., the signs and symptoms as well as the appropriate treatment of hypoglycemia. Information on the epidemiology of diabetes (B), the association between hyperglycemia and defects (C), and carbohydrate counting (D), although important, is not information/skills that are needed immediately.

2. **B.** Diabetes education should be tailored to patient preferences with regard to timing, delivery method, and use of technology. This young patient is very comfortable with technology and is likely very busy based on the number of interruptions during the session. Scheduling education sessions in the morning (A) may be convenient for the educator but not the patient. Text messaging and constant contact with friends are considered appropriate for young patients, so educators should not expect patients to leave their cell phones at home (C). Social networking with peers is important for patients; however, young patients often prefer online networking forums over face-to-face meetings (D).

3. **D.** Many adults who are illiterate are able to successfully hide their literacy deficit. The other three choices (A, B, and C) are all commonly held misconceptions regarding low literacy and are not accurate.