



ADVANCED CMA: INSULIN ADMINISTRATION

OD68609

MEETS OSDH NURSE AIDE REGISTRY CERTIFICATION REQUIREMENTS

COMPETENCY-BASED EDUCATION: OKLAHOMA'S RECIPE FOR SUCCESS

BY THE INDUSTRY FOR THE INDUSTRY

Oklahoma's *CareerTech* system of competency-based education uses industry professionals and certification standards to identify the knowledge and abilities needed to master an occupation. This industry input provides the foundation for development of instructional materials that help prepare the comprehensively trained, highly skilled employees demanded by our workplace partners.

TOOLS FOR SUCCESS

CareerTech relies on three basic instructional components to deliver competency-based instruction: skills standards, curriculum materials, and competency assessments.

Skills standards provide the foundation for competency-based instruction in Oklahoma's *CareerTech* system. The skills standards outline the knowledge, skills, and abilities needed to perform related jobs within an industry. Skills standards are aligned with national skills standards; therefore, a student trained to the skills standards possesses technical skills that make him/her employable in both state and national job markets.

Curriculum materials contain information and activities that teach students the knowledge and skills outlined in the skills standards. In addition to complementing classroom instruction, curriculum resources provide supplemental activities to enhance learning and provide hands-on training experiences.

Competency Assessments test the student over material outlined in the skills standards and taught using the curriculum materials. When used with classroom performance evaluations, written competency assessments provide a means of measuring occupational readiness.

Although each of these components satisfy a unique purpose in competency-based education, they work together to reinforce the skills and abilities students need to gain employment and succeed on the job.

MEASURING SUCCESS

Written competency assessments are used to evaluate student performance. Results reports communicate competency assessment scores to students and provide a breakdown of assessment results by duty area. The results breakdown shows how well the student has mastered skills needed to perform major job functions and identifies areas of job responsibility that may require additional instruction and/or training.

Group analysis of student results also provides feedback to instructors seeking to improve the effectiveness of career and technology training. Performance patterns in individual duties indicate opportunities to evaluate training methods and customize instruction.

TRUE TO OUR PURPOSE

"Helping Oklahomans succeed in the workplace" defines the mission of Oklahoma *CareerTech* and its competency-based system of instruction. Skills standards, curriculum, and assessments that identify and reinforce industry expectations provide accountability for programs and assure *CareerTech*'s continued role in preparing skilled workers for a global job market

Copyright 2006
Oklahoma Department of Career and Technology Education
All rights reserved

Printed in the United States of America by the
Oklahoma Department of Career and Technology Education
Stillwater, Oklahoma

The Oklahoma Department of Career and Technology Education does not discriminate on the basis of race, creed, color, national origin, sex, age, veteran status, or qualified handicap.

**ADVANCED CERTIFIED MEDICATION AIDES-DIABETES
SKILLS STANDARDS
Frequency and Criticality Ratings**

- Duty A: Pathophysiology of diabetes
- Duty B: Diabetes disease management
- Duty C: Blood glucose testing and use of equipment
- Duty D: Stable and unstable diabetes
- Duty E: Diabetes care by managing blood glucose levels
- Duty F: Charting, graphing, and record-keeping
- Duty G: Diabetic medications and adverse reactions (Insulin)
- Duty H: Diabetic medications and adverse reactions (Oral Agents)
- Duty I: Administration of diabetic medications
- Duty J: Infection control and universal precautions for blood borne pathogens

Frequency: represents how often the task is performed on the job. Frequency rating scales vary for different occupations. The rating scale used in this publication is presented below:

- 1 = less than once a week
- 2 = at least once a week
- 3 = once or more a day

Criticality: denotes the level of consequence associated with performing a task incorrectly. The rating scale used in this publication is presented below:

- 1 = slight
- 2 = moderate
- 3 = extreme

DUTY A: Pathophysiology of diabetes

CODE	TASK	F/C
A.01	Define diabetes	2/2
A.02	Describe the action of insulin in the body	2/3
A.03	Explain the differences between the types of diabetes	2/2

DUTY B: Diabetes disease management

CODE	TASK	F/C
B.01	Describe the relationship between insulin, diet, and physical activity in management of diabetes	3/3
B.02	Explain how diet relates to blood glucose control	3/3

DUTY C: Blood glucose testing and use of equipment

CODE	TASK	F/C
C.01	Explain the purpose of blood glucose testing	2/2
C.02	Demonstrate how to use blood glucose testing equipment with accuracy	3/3
C.03	Explain the quality control requirements for glucose monitoring equipment and the purpose and frequency of control testing	2/2
C.04	Demonstrate both high and low controls of the glucose monitoring equipment	2/2

DUTY D: Stable and unstable diabetes

CODE	TASK	F/C
D.01	Identify appropriate blood glucose levels for persons with diabetes	3/3
D.02	Define hypoglycemia	3/3
D.03	List causes and symptoms of hypoglycemia	3/3
D.04	Define hyperglycemia	3/3
D.05	List causes and symptoms of hyperglycemia	3/3
D.06	Define stable and unstable diabetes	2/2
D.07	Describe the differences between stable and unstable diabetes	2/2

DUTY E: Diabetes care by managing blood glucose levels

CODE	TASK	F/C
E.01	List three carbohydrate choices used to treat hypoglycemia	3/3
E.02	Describe measures to prevent hypoglycemia	3/3
E.03	Describe the relationship between blood glucose levels and indications for glucagons use	2/3
E.04	Describe measures to prevent hyperglycemia	3/3
E.05	State when to contact and what to report to a licensed health care provider	3/3

DUTY F: Charting, graphing, and record-keeping

CODE	TASK	F/C
F.01	Explain the reason for accurate documentation of all aspect of diabetes management and care	3/3
F.02	Identify correct forms for documentation	3/3
F.03	Demonstrate the ability to accurately document diabetes management and care	3/3

DUTY G: Diabetic medications and adverse reactions (Insulin)

CODE	TASK	F/C
G.01	Describe the purpose of insulin	3/3
G.02	State the types of insulin and each onset, peak and duration of action	2/2
G.03	Explain the difference between basal and bolus insulin	2/2
G.04	State common side effects, adverse reactions, and precautions for insulin	3/3

DUTY H: Diabetic medications and adverse reactions (Oral agents)

CODE	TASK	F/C
H.01	Describe the purpose, action, and recommended doses of each oral agent	2/2
H.02	State common side effects, adverse reactions, and precautions for each oral agent	3/2

DUTY I: Administration of diabetic medications

CODE	TASK	F/C
I.01	State the correct administration times for insulin and oral agents relevant to meals and mechanisms of action	3/3
I.02	Identify the preferred sites for an insulin injection and describe site rotation patterns	3/3
I.03	Discuss the proper storage of insulin	3/3
I.04	Demonstrate the accurate measurement and correct technique of a single and a mixed dose of insulin	3/3
I.05	Explain why it is required to check insulin type and dose drawn with another certified medication aide or licensed health care provider	3/3
I.06	Demonstrate administration of a dose of insulin	3/3

DUTY J: Infection control and universal precautions for blood borne pathogens

CODE	TASK	F/C
J.01	Define the term "universal precautions"	3/3
J.02	Demonstrate safe handling of diabetic equipment	3/3
J.03	Explain proper disposal of used diabetic equipment	3/3