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# **FACULTY INSTRUCTIONS**

This vignette is the first of an intended series of vignettes for measuring competencies in population health. The vignette serves two purposes: as one element for measuring student competencies in population health; and as an exemplar of competency measurement. The vignette can be used as part of a course in population or public health or as part of an end of program course, to determine student ability to synthesize population health concepts with other skills in patient care across the care continuum. The vignette can be used as a measure of individual competencies, or as a group discussion tool. This vignette was piloted and found to be a valid and reliable measure of the relevant competencies, which are listed at the end of the vignette, along with the answers. Faculty can use this as a template for development of additional vignettes to measure competencies as outlined by the AACN Essentials in the Population Health Domain.

# BACKGROUND AND OVERVIEW

Over time, nursing has been moving towards competency based education across the entire nursing curriculum. Competencies confirm how specialized nursing practice is implemented and are complementary to nursing standards. A competency is defined as an observable ability of a health professional, integrating multiple components such as knowledge, skills, values, and attitudes (Frank, Snell, Cate, et al., 2010). Because competencies are observable, they can be measured to ensure that students have acquired them during their education. Today's community/public health nursing (C/PHN) competencies can be traced back to the early PHN objectives of the 1930s (Abrams, 2008, 2004; QC, 2011, 1997). More recently C/PHN competencies have been connected to broader, interdisciplinary public health competencies through the Council on Linkages Between Academia and Public Health Practice (CoL). The Council of Public Health Nursing Organizations (formerly known as the Quad Council) has modified CoL competencies in Public Health to reflect nursing roles (Quad Council, 2018). One limitation to these competencies is they are challenging to measure and most nursing education programs design their public health curricula around broad concepts with little common measurement of expected student outcomes. To address this, the Advisory Group for the AACN CDC Collaborative Agreement on Public/Population Health in Nursing designed a pilot project to test a vignette/case study approach to measuring PHN competencies. This preliminary work is an important start to ensure that all nurses educated at the BSN level and above can demonstrate core competencies in public health nursing. The vignette is presented below for use by nursing educators. Further efforts are needed to measure student outcomes in core PHN competencies.

# AACN PUBLIC/POPULATION HEALTH NURSING ASSESSMENT - VIGNETTE

You are a nurse at a local hospital in an urban area. In the past month, you have discharged the following ten clients between the ages of 23-35 who were hospitalized with short-term complications of uncontrolled type 2 diabetes mellitus:

- 3 Latino males
- 2 African American females
- 1 American Indian female
- 2 Filipino males
- 1 Caucasian male
- 1 Caucasian female

This has you concerned. You review your discharge planning for this population of young adults.

- 1. Which three of these risk factors for uncontrolled type 2 diabetes mellitus are MOST important to consider when planning care for clients at discharge? Select three.
  - a. Family history
  - b. High blood pressure
  - c. History of asthma
  - d. Pregnancy
  - e. Sedentary lifestyle
  - f.Obesity

The standardized discharge care plans for adults with uncontrolled diabetes have not been updated in five years. During discharge discussions, your clients have shared concerns that are not addressed in these plans, including challenges to managing their diabetes after they return home.

- 2. What would you need to know about this population with uncontrolled type 2 diabetes to help them plan for their care after discharge? Select all that apply.
  - a. Educational level
  - b. Current living arrangements
  - c. Parents' health status
  - d.Occupation
  - e. Preferred language
  - f. Number of children

As you look at the discharge plans, you recognize that the focus is on access to medication and having follow-up appointments.

- 3. In addition to medications and follow-up appointments, which of the following would be MOST important to address in the discharge plans?
  - a. Blood glucose monitoring
  - b. High-fiber diet
  - c. Family history
  - d. Foot care

You are interested in how the hospital addresses the social determinants of health.

- 4. Who is the BEST person to contact to find out about the hospital's involvement in community care for people with diabetes?
  - a. Chief Executive Officer
  - b. Chief Medical Officer
  - c.Client Advocate
  - d. Director of Social Work

The Quality Improvement Director meets with you and the Director of Social Work to discuss your concern about community risk factors for diabetes. You present the hospital data showing the increasing trend in clients admitted with a primary diagnosis of diabetes over the past year. You talk about what these data mean for the hospital and for its community.

- 5. Where would be the BEST place to get valid and reliable data to determine if diabetes has increased in the community over the past five years?
  - a. Hospital diabetes registry
  - b. Local health department
  - c. Local medical association
  - d. Local nursing association
- 6. Which data would be MOST important to determine if diabetes is an increasing health problem in your community?
  - a. Diabetes incidence rates for the community
  - b. Diabetes prevalence rates for the community
  - c. Obesity rates for adults with diabetes in the community
  - d. Obesity rates for children with diabetes in the community

- 7. To be able to better understand factors influencing the occurrence of diabetes mellitus type 2 in your area, which of the following data would be MOST helpful?
  - a. State level diabetes prevalence rates by age, educational level, and socioeconomic status
  - b. Local community diabetes incidence rates by race/ethnicity, gender, and socioeconomic status
  - c. National date on diabetes incidence rates by gender, age, and socioeconomic status
  - d. Community hospital diabetes registry data by name, age, gender, and race/ethnicity

You discover that diabetes prevalence in 18-35-year-olds in your community is higher than the state prevalence rate for the same age group.

After reviewing your discharged clients' records, you also notice that eight of the ten live in the same zip code.

- 8. Which risk factor for poorly controlled diabetes is better addressed at the community level than at the individual level?
  - a. Lack of recreational space for physical activity
  - b. Generational family history
  - c. Lack of community knowledge of health diets
  - d. Gestational diabetes

The Director of Social Work introduces you to the county Public Health Nurse (PHN) to talk about your findings. The PHN tells you that many people in the zip code you identified report not feeling safe to walk/exercise in the area. The neighborhood is very dense, with apartment buildings, many busy streets and malls.

The county has been working on trying to create safe spaces for exercise for county residents. The PHN asks if you would like to go to the next Board of Health meeting and present your concerns.

- 9. Which is the MOST significant evidence you could present to the Board of Health to help with their deliberations?
  - a. County and state data on diabetes prevalence
  - b. Hospital data on diabetes prevalence in clients from the zip code
  - c. Clients' stories about managing diabetes in this community
  - d. An explanation of the consequences of uncontrolled diabetes

After the meeting, the Board of Health decides to work on developing a walking path at the local high school that is accessible to the public.

- 10. Which of the following individuals needs to be involved in planning the walking path? Select all that apply.
  - a. School District Superintendent
  - b. Public Health Nurse
  - c. Primary Healthcare Providers
  - d. Physical Education Teacher
  - e. Local residents
  - f. High School Principal

One year later, the PHN reports to the RN that the walking path has been established.

- 11. What is the MOST important action the RN can take in the hospital to use this information to help clients?
  - a. Announce the new walking path at the next unit meeting
  - b. Report the new resource to the Social Work department
  - c. Put up posters in the hospital about the new walking path
  - d. Revise discharge planning documents to include local physical-activity resources

# **ANSWER KEY**

You are a nurse at a local hospital in an urban area. In the past month, you have discharged the following ten clients between the ages of 23-35 who were hospitalized with short-term complications of uncontrolled type 2 diabetes mellitus:

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  - d. Pregnancy
  - e. Sedentary lifestyle
  - f.Obesity

Answers: b, e, f

**Quad Council Competency** 

Domain 4 - Cultural Competency Skills

 Competency 1 - Utilize the social and ecological determinants of health to work effectively with diverse individuals, families, and groups The standardized discharge care plans for adults with uncontrolled diabetes have not been updated in five years. During discharge discussions, your clients have shared concerns that are not addressed in these plans, including challenges to managing their diabetes after they return home.

- 2. What would you need to know about this population with uncontrolled type 2 diabetes to help them plan for their care after discharge? Select all that apply.
  - a. Educational level
  - b. Current living arrangements
  - c. Parents' health status
  - d.Occupation
  - e. Preferred language
  - f. Number of children

#### Answers: a, b, d, e

**Quad Council Competencies** 

Domain 2 - Policy Development & Program Planning Skills

• Competency 1 - Identify policy issues relevant to the health of individuals, families, and groups. Describe the structure of the public health system and its impact on individuals, families, and groups within a population

Domain 4 - Cultural Competency Skills

 Competency 1 - Utilize the social and ecological determinants of health to work effectively with diverse individuals, families, and groups

Domain 5 - Community Dimensions of Practice Skills

• Competency 1 - Utilize an ecological perspective in health assessment, planning, and interventions with individuals, families and groups

As you look at the discharge plans, you recognize that the focus is on access to medication and having follow-up appointments.

- 3. In addition to medications and follow-up appointments, which of the following would be MOST important to address in the discharge plans?
  - a. Blood glucose monitoring
  - b. High-fiber diet
  - c. Family history
  - d. Foot care

#### Answer: a

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  - c.Client Advocate
  - d. Director of Social Work

#### Answer: d

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- Competency 1 Utilize an ecological perspective in health assessment, planning, and interventions with individuals, families and groups
- Competency 6 Participate effectively in activities that facilitate community involvement in creating a healthy environment for individuals, families, and groups

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  - b. Local health department
  - c. Local medical association
  - d. Local nursing association

#### Answer: b

**Quad Council Competencies** 

Domain 1 - Analytic & Assessment Skills

 Competency 2 - Use epidemiological data and the ecological perspective to identify health risks for a population

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  - c. Obesity rates for adults with diabetes in the community
  - d. Obesity rates for children with diabetes in the community

#### Answer: a

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  - c. National date on diabetes incidence rates by gender, age, and socioeconomic status
  - d. Community hospital diabetes registry data by name, age, gender, and race/ethnicity

#### Answer: b

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#### Answer: a

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- d. An explanation of the consequences of uncontrolled diabetes

#### Answer: b

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#### Domain 3 - Communication Skills

 Competency 5 - Demonstrate ability to present targeted health information to multiple audiences at a local level, including groups, peer professionals, and agency peers

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