# Module Report

**Tutorial:** **Real Life RN Nursing Care of Children 3.0**

**Module:** **Gastroenteritis and Dehydration**

Individual Name: **Hannah Johnson**

Institution: **Lakeview CON**

Program Type: **BSN**

## Standard Use Time and Score

| | Date/Time | Time Use | Score |
|---|---|---|---|
| Gastroenteritis and Dehydration | 3/25/2020 10:27:12 PM | 14 min | Strong |

## Reasoning Scenario Details
## Gastroenteritis and Dehydration - Use on 3/25/2020 10:12:44 PM

## Reasoning Scenario Performance Related to Outcomes:

*See Score Explanation and Interpretation below for additional details.

| Body Function | Strong | Satisfactory | Needs Improvement |
|---|---|---|---|
| Cognition and Sensation | 100% | | |
| Ingestion, Digestion, Absorption & Elimination | 100% | | |
| Integument | 100% | | |
| Regulation and Metabolism | 100% | | |

| NCLEX RN | Strong | Satisfactory | Needs Improvement |
|---|---|---|---|
| RN Management of Care | 100% | | |
| RN Safety and Infection Control | 100% | | |
| RN Psychosocial Integrity | 100% | | |
| RN Pharmacological and Parenteral Therapies | 100% | | |
| RN Reduction of Risk Potential | 100% | | |
| RN Physiological Adaptation | 100% | | |

| QSEN | Strong | Satisfactory | Needs Improvement |
|---|---|---|---|
| Safety | 100% | | |
| Patient-Centered Care | 100% | | |
| Evidence Based Practice | 100% | | |
| Informatics | 100% | | |

## Decision Log:

| Optimal Decision | |
|---|---|
| **Scenario** | Nurse Susan is reviewing the isolation prescription for Matthew. |
| **Question** | Nurse Susan is reviewing the isolation prescription for Matthew. Which of the following types of isolation precautions should Susan implement? |
| **Selected Option** | Contact |
| **Rationale** | The nurse should use contact precautions for clients who have a known or anticipated illness that is transmitted through contact with gastrointestinal secretions or drainage from skin or wound infections. The client's condition warrants contact precautions until laboratory findings are available. |

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| **Scenario** | Nurse Susan received a report from Nurse Mary. |
| **Question** | Nurse Mary gave a report to Nurse Susan. Using the SBAR format, place the information from the report in the appropriate category. (Fill in the blank and click on the Submit button when you finish.) |
| **Selected Option** | SBAR |
| **Rationale** | SBAR:<br>S = Situation – A 4-year-2-month-old male client, with parent, admitted with dehydration<br>B = Background – The client came to the clinic this morning after having diarrhea for 2 days. He has a poor appetite and has only had sips of fluid for more than 1 day. He is crying and reports abdominal pain. He attends day care full time and is potty trained, but is wearing diaper briefs because of the diarrhea.<br>A = Assessment – The client has an elevated T of 38.0° C, P of 120/min, and R 30/min. He has clear lung sounds, no murmurs, and hyperactive bowel sounds. He is crying and has a pain level of 3 on the FACES scale.<br>R = Recommendations/Request – Admitting prescriptions for the hospital are in the computer. |

| **Optimal Decision** | |
|---|---|
| **Scenario** | Nurse Susan completes the admission assessment of Matthew. |
| **Question** | Nurse Susan completes the admission assessment of Matthew. Which of the following is the priority action based on the assessment? |
| **Selected Option** | Initiate IV access. |
| **Rationale** | Rehydration is the primary goal for a client who is dehydrated. Oral replacement is not an option for the client because of vomiting. |

| **Optimal Decision** | |
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| **Scenario** | Nurse Susan is gathering supplies to insert an IV catheter for a saline lock. |
| **Question** | Nurse Susan is gathering supplies to insert an IV catheter for a saline lock. The IV start kit contains a tourniquet, antiseptic pads, 1-inch paper tape, and a transparent dressing. Which of the following images includes the additional supplies she should obtain? |
| **Selected Option** | Image\|RN_NCC_GD_8_b_800.jpg |
| **Rationale** | This image includes the supplies the nurse needs to insert an IV catheter with a saline lock. |

| **Optimal Decision** | |
|---|---|
| **Scenario** | Nurse Susan calculates the rate of flow for the IV infusion. |
| **Question** | Nurse Susan is caring for Matthew who is to receive IV fluids using an infusion pump. Which of the following is the correct rate of flow for the IV solution? (Round the answer to the nearest whole number.) |
| **Selected Option** | 133 mL/hr |
| **Rationale** | S |

**Follow these steps to calculate the infusion rate using the Ratio and Proportion method of calculation:**
Step 1: What is the unit of measurement the nurse should calculate? mL/hr
Step 2: What is the volume the nurse should infuse? 200 mL
Step 3: What is the total infusion time? 90 min
Step 4: Should the nurse convert the units of measurement? Yes (min does not equal hr)
60 ~~min~~90 ~~min~~ = 1 hr*X*
*X* = 1.5 hr
Step 5: Set up an equation and solve for X.
*Volume (mL)X* mL/hr =  *Time (hr)200 mLX mL/hr = &#1601.5 hr*
*X mL/hr = 133.33 mL/hr*
*Step 6: Round if necessary. 133.33 mL/hr = 133 mL/hr*
*Step 7: Determine whether the amount to administer makes sense. If the prescription reads 200 mL to infuse over 90 min, it makes sense to administer 133 mL/hr. The nurse should set the IV pump to deliver 0.9% sodium chloride at 133 mL/hr.*
***Follow these steps to calculate the infusion rate using the Desired Over Have method of calculation:***
*Step 1: What is the unit of measurement the nurse should calculate? mL/hr*
*Step 2: What is the volume the nurse should infuse? 200 mL*
*Step 3: What is the total infusion time? 90 min*
*Step 4: Should the nurse convert the units of measurement? Yes (min does not equal hr)*
*90 ~~min~~ × 1 hrX hr = 60 ~~min~~*
*X hr = 1.5 hr*
*Step 5: Set up an equation and solve for X.*
*Volume (mL)X mL/hr =  Time (hr)200 mLX mL/hr = &#1601.5 hr*
*X mL/hr = 133.33 mL/hr*
*Step 6: Round if necessary. 133.33 mL/hr = 133 mL/hr*
*Step 7: Determine whether the amount to administer makes sense. If the prescription reads 200 mL to infuse over 90 min, it makes sense to administer 133 mL/hr. The nurse should set the IV pump to deliver 0.9% sodium chloride at 133 mL/hr.*
***Follow these steps to calculate the infusion rate using the Dimensional Analysis method of calculation:***
*Step 1: What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)*
*X mL/hr =*
*Step 2: Determine the ratio that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equation, ensuring that the unit in the numerator matches the unit being calculated.)*
*200 mLX mL/hr = &#16090 min*
*Step 3: Place any remaining ratios that are relevant to the item on the right side of the equation, along with any needed conversion factors, to cancel out unwanted units of measurement.*
*200 mL60 ~~min~~X mL/hr =   × &#16090 ~~min~~1 hr*
*Step 4: Solve for X.*
*X mL/hr = 133.33 mL/hr*
*Step 5: Round if necessary. 133.33 mL/hr = 133 mL/hr*
*Step 6: Determine whether the amount to administer makes sense. If the prescription reads 200 mL to infuse over 90 min, it makes sense to administer 133 mL/hr. The nurse should set the IV pump to deliver 0.9% sodium chloride at*

| | |
|---|---|
| | *133 mL/hr.* |

| Optimal Decision | |
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| **Scenario** | Nurse Susan selects appropriate documentation of intake and output. |
| **Question** | Nurse Susan documents Matthew's intake and output. Which of the following flow sheets indicates the correct documentation? |
| **Selected Option** | Image\|RN_NCC_GD_12_d_800px.jpg |
| **Rationale** | This is an example of correct documentation of intake and output. |

| Optimal Decision | |
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| **Scenario** | Nurse Susan chooses a priority action based on her assessment and Matthew's laboratory findings. |
| **Question** | Based on Matthew's laboratory findings and Nurse Susan's assessment, which of the following is the priority action for Susan to take? |
| **Selected Option** | Obtain a prescription for potassium. |
| **Rationale** | The laboratory test results indicate the client's serum potassium is critically low. The nurse should notify the provider because the client needs supplemental potassium. This is the priority action. |

| Optimal Decision | |
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| **Scenario** | Nurse Susan plans to administer intravenous potassium chloride solution. |
| **Question** | After Dr. Wilson changed Matthew's prescriptions, Nurse Susan is preparing to administer IV potassium chloride solution. Which of the following is the correct technique for administering this medication? |
| **Selected Option** | Administer an intermittent IV bolus of 5 mEq potassium chloride in 100 mL 0.9% sodium chloride over 1 hr. |
| **Rationale** | Infusing a potassium chloride solution by IV intermittent bolus at a rate of 0.5 to 1 mEq/kg/hr in children is the correct action to resolve hypokalemia. |

| Optimal Decision | |
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| **Scenario** | Nurse Susan teaches Matthew's mother about using clotrimazole (Lotrimin) cream to treat diaper rash. |
| **Question** | Nurse Susan is teaching Matthew's mother about using clotrimazole (Lotrimin) cream to treat diaper rash. Which of the following should she include in the teaching? |
| **Selected Option** | Dry skin thoroughly before applying the medication. |
| **Rationale** | Individuals using clotrimazole should cleanse the affected area with an appropriate cleansing agent and dry the area thoroughly before applying the cream. |

| Optimal Decision | |
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| **Scenario** | Nurse Susan is choosing age-appropriate toys for Matthew. |

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| **Question** | Nurse Susan is choosing age-appropriate toys for Matthew to use during isolation. Which of the following toys are appropriate? (Select all that apply.) |
| **Selected Ordering** | Image\|RN_NCC_GD_20_c_800px.jpgImage\| RN_NCC_GD_20_d_800px.jpgImage\|RN_NCC_GD_20_e_800px.jpgImage\| RN_NCC_GD_20_f_800px.jpg |
| **Rationale** | Building blocks, soldiers, tractors, and paper and crayons encourage developmental creativity in a 4-year-old client. These toys are developmentally appropriate and safe, and the nurse can clean them effectively after the client uses them in contact isolation. A stuffed plush animal and pop-up book are not developmentally appropriate for a 4-year-old client or the nurse cannot clean them effectively after the client uses them in contact isolation. |

| **Optimal Decision** | |
|---|---|
| **Scenario** | Nurse Susan responds to Matthew's mother crying. |
| **Question** | Nurse Susan notices Matthew's mother crying. Which of the following statements by the Susan is a therapeutic response? |
| **Selected Option** | "There are many resources available to you while you are here. We can discuss them if you like." |
| **Rationale** | Providing information creates open communication, which is a therapeutic communication technique. |

| **Optimal Decision** | |
|---|---|
| **Scenario** | Nurse Susan is preparing to administer promethazine hydrochloride. |
| **Question** | Nurse Susan is preparing to administer promethazine. Available is promethazine 25 mg/mL. Which of the following images of a syringe represents the correct amount of medication Susan should administer? (Round the answer to the nearest hundredth.) |
| **Selected Option** | Image\|RN_NCC_GD_24_b_800px.jpg |

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| **Rationale** | **Follow these steps for the Ratio and Proportion method of calculation:**<br>Step 1: What is the unit of measurement the nurse should calculate? mL<br>Step 2: What is the dose the nurse should administer? Dose to administer = Desired 7 mg<br>Step 3: What is the dose available? Dose available = Have 25 mg<br>Step 4: Should the nurse convert the units of measurement? No<br>Step 5: What is the quantity of the dose available? 1 mL<br>Step 6: Set up an equation and solve for X.<br>*HaveDesired =  QuantityX25 mg7 mg = &#1601 mLX mL*<br>*X mL = 0.28 mL*<br>*Step 7: Round if necessary.*<br>*Step 8: Determine whether the amount to administer makes sense. If there are 25 mg/mL and the prescription reads 7 mg, it makes sense to administer 0.28 mL. The nurse should administer promethazine 0.28 mL.*<br>***Follow these steps for the Desired Over Have method of calculation:***<br>*Step 1: What is the unit of measurement the nurse should calculate? mL*<br>*Step 2: What is the dose the nurse should administer? Dose to administer = Desired 7 mg*<br>*Step 3: What is the dose available? Dose available = Have 25 mg*<br>*Step 4: Should the nurse convert the units of measurement? No*<br>*Step 5: What is the quantity of the dose available? 1 mL*<br>*Step 6: Set up an equation and solve for X.*<br>*Desired × QuantityX =  Have7 ~~mg~~ × 1 mLX mL = &#16025 ~~mg~~*<br>*X mL = 0.28 mL*<br>*Step 7: Round if necessary.*<br>*Step 8: Determine whether the amount to administer makes sense. If there are 25 mg/mL and the prescription reads 7 mg, it makes sense to administer 0.28 mL. The nurse should administer promethazine 0.28 mL.*<br>***Follow these steps for the Dimensional Analysis method of calculation:***<br>*Step 1: What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)*<br>*X mL =*<br>*Step 2: Determine the ratio that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equation, ensuring that the unit in the numerator matches the unit being calculated.)*<br>*1 mLX mL = &#16025 mg*<br>*Step 3: Place any remaining ratios that are relevant to the item on the right side of the equation, along with any needed conversion factors, to cancel out unwanted units of measurement.*<br>*1 mL7 ~~mg~~X mL =   × &#16025 ~~mg~~1*<br>*Step 4: Solve for X.*<br>*X mL = 0.28 mL*<br>*Step 5: Round if necessary.*<br>*Step 6: Determine whether the amount to administer makes sense. If there are 25 mg/mL and the prescription reads 7 mg, it makes sense to administer 0.28 mL. The nurse should administer promethazine 0.28 mL.* |

| **Optimal Decision** | |
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| **Scenario** | Nurse Susan is choosing the appropriate site to administer promethazine hydrochloride (Phenergan) IM. |

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| **Question** | Nurse Susan is preparing to administer promethazine (Phenergan) IM to Matthew. Which of the following is an appropriate site for the injection? |
| **Selected Option** | Ventrogluteal muscle |
| **Rationale** | The nurse should inject promethazine deep IM into a large muscle mass that is away from the nerves. The ventrogluteal muscle is the most appropriate and safest site for the injection. |

| **Optimal Decision** | |
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| **Scenario** | Nurse Susan reviews Matthew's preliminary stool culture findings and prepares to explain them to Matthew's mother. |
| **Question** | Nurse Susan reviewed Matthew's preliminary stool culture findings and is preparing to explain the results to Matthew's mother. Which of the following is an accurate statement by Matthew's mother? |
| **Selected Option** | "Matthew's diarrhea will subside in 1 week." |
| **Rationale** | This is an accurate statement by the nurse. Diarrhea due to salmonella usually resolves within 5 to 7 days, with shedding of the virus in about 5 weeks. |

| **Optimal Decision** | |
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| **Scenario** | Nurse Susan provides discharge instructions to Matthew's mother. |
| **Question** | Nurse Susan is preparing to provide discharge instructions to Matthew's mother. Which of the following should Susan include in the teaching? |
| **Selected Option** | "Matthew should incorporate oral rehydration fluid with a regular diet." |
| **Rationale** | For optimal nutrient value and reabsorption, the nurse should recommend early reintroduction of solid food with oral rehydration for a client who has diarrhea. |

# Individual Report – Score Explanation and Interpretation

## Reasoning Scenario Information:

Reasoning Scenario Information provides the date, time and duration of use, along with the score earned for each attempt. A Reasoning Scenario Performance score of Strong, Satisfactory, or Needs Improvement is provided for each attempt. This information is also provided for the Optimal Decision Mode if it has been enabled.

## Reasoning Scenario Performance Scores:

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| **Strong** | Exhibits optimal reasoning that results in positive outcomes in the care of clients and resolution of problems. |
| **Satisfactory** | Exhibits reasoning that results in mildly helpful or neutral outcomes in the care of clients and resolution of problems. |
| **Needs Improvement** | Exhibits reasoning that results in harmful or detrimental outcomes in the care of clients and resolution of problems. |

## Reasoning Scenario Performance Related to Outcomes:

A clinical reasoning performance score related to each outcome is provided. Outcomes associated with student responses are listed in the report. The number across from each outcome indicates the percentage of responses associated with the level of performance of that outcome.

## NCLEX® Client Need Categories:

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|---|---|
| **Management of Care** | Providing integrated, cost-effective care to clients by coordinating, supervising, and/or collaborating with members of the multi-disciplinary health care team. |
| **Safety and Infection Control** | Incorporating preventative safety measures in the provision of client care that provides for the health and well-being of clients, significant others, and members of the health care team. |
| **Health Promotion and Maintenance** | Providing and directing nursing care that encourages prevention and early detection of illness, as well as the promotion of health. |
| **Psychosocial Integrity** | Promoting mental, emotional, and social well-being of clients and significant others through the provision of nursing care. |
| **Basic Care and Comfort** | Promoting comfort while helping clients perform activities of daily living. |
| **Pharmacological and Parenteral Therapies** | Providing and directing administration of medication, including parenteral therapy. |
| **Reduction of Risk Potential** | Providing nursing care that decreases the risk of clients developing health-related complications. |

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| **Physiological Adaptation** | Providing and directing nursing care for clients experiencing physical illness. |

## Quality and Safety Education for Nurses (QSEN)

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| **Safety** | The minimization of risk factors that could cause injury or harm while promoting quality care and maintaining a secure environment for clients, self, and others. |
| **Patient-Centered Care** | The provision of caring and compassionate, culturally sensitive care that is based on a client's physiological, psychological, sociological, spiritual, and cultural needs, preferences, and values |
| **Evidence Based Practice** | The use of current knowledge from research and other credible sources, upon which clinical judgment and client care are based. |
| **Informatics** | The use of information technology as a communication and information gathering tool that supports clinical decision making and scientifically based nursing practice. |
| **Quality Improvement** | Care related and organizational processes that involve the development and implementation of a plan to improve health care services and better meet the needs of clients. |
| **Teamwork and Collaboration** | The delivery of client care in partnership with multidisciplinary members of the health care team, to achieve continuity of care and positive client outcomes. |

## Body Function

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| **Cardiac Output and Tissue Perfusion** | The anatomical structures (heart, blood vessels, and blood) and body functions that support adequate cardiac output and perfusion of body tissues. |
| **Cognition and Sensation** | The anatomical structures (brain, central and peripheral nervous systems, eyes and ears) and body functions that support perception, interpretation, and response to internal and external stimuli. |
| **Excretion** | The anatomical structures (kidney, ureters, and bladder) and body functions that support filtration and excretion of liquid wastes, regulate fluid and electrolyte and acid-base balance. |
| **Immunity** | The anatomic structures (spleen, thymus, bone marrow, and lymphatic system) and body functions related to inflammation, immunity, and cell growth. |
| **Ingestion, Digestion, Absorption and Elimination** | The anatomical structures (mouth, esophagus, stomach, gall bladder, liver, small and large bowel, and rectum) and body functions that support ingestion, digestion, and absorption of food and elimination of solid wastes from the body. |
| **Integument** | The anatomical structures (skin, hair, and nails) and body functions related to protecting the inner organs from the external environment and injury. |
| **Mobility** | The anatomical structures (bones, joints, and muscles) and body functions that support the body and provide its movement. |

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| **Oxygenation** | The anatomical structures (nose, pharynx, larynx, trachea, and lungs) and body functions that support adequate oxygenation of tissues and removal of carbon dioxide. |
| **Regulation and Metabolism** | The anatomical structures (pituitary, thyroid, parathyroid, pancreas, and adrenal glands) and body functions that regulate the body's internal environment. |
| **Reproduction** | The anatomical structures (breasts, ovaries, fallopian tubes, uterus, vagina, vulva, testicles, prostate, scrotum, and penis) and body functions that support reproductive functions. |

## Decision Log

Information related to each question answered in a scenario attempt is listed in the report. A brief description of the scenario, question, selected option and rationale for that option are provided for each question answered. The words "Optimal Decision" appear next to the question when the most optimal option was selected.

The rationale for each selected option may be used to guide remediation. A variety of learning resources may be used in the review process, including related ATI Review Modules.