N433 Care Plan #1

Lakeview College of Nursing

Taylor Sullivan

Demographics (3 points)

Date of Admission 10-1-20	Patient Initials CC	Age (in years & months) 45 days	Gender M
Code Status Full	Weight (in kg) 4.62	BMI 17.9	Allergies/Sensitivities (include reactions) NKA

Medical History (5 Points)

Past Medical History: Cystic fibrosis – 3 days old

Illnesses: None

Hospitalizations: None

Past Surgical History: None

Immunizations: Not up to date

Birth History: Born full term at 37 weeks 3 days by spontaneous vaginal delivery

Complications (if any): None

Assistive Devices: None

Living Situation: At home with mom, grandma, maternal uncle, no one in the home smokes

Admission Assessment

Chief Complaint (2 points): Respiratory distress and recurrent vomiting

Other Co-Existing Conditions (if any): Cystic Fibrosis

Pertinent Events during this admission/hospitalization (1 points): None

History of present Illness (10 points): Client has a history of cystic fibrosis. Presented to the ED with respiratory distress and recurrent vomiting. Clients mother reported the client had a "dry, wheezy" cough followed by an emesis described as "projectile, green/yellow,

foamy, with presence of formula and mucus in it." This occurred 15-30 minutes after a feed. No presence of blood was noted. Client has shown a decrease in feedings sense the weekend. Approximately 1-3 oz every 2-4 hours, previously it was 4-7 oz. Client was on Enfamil gentelease and switched to neuropro when vomiting worsened on Monday. Tested COVID 19 negative on Monday. Outside of facility chest x-ray showed no abnormalities, and abdominal x-ray showed CF associated with no obstruction. Client has had normal wet dippers, bowel movements are "orange/green." Client is on pancreatic enzymes. Denies fever, chills, recent illness, or sick contacts

Primary Diagnosis

Primary Diagnosis on Admission (2 points):. Respiratory distress and Recurrent vomiting

Secondary Diagnosis (if applicable): None

Pathophysiology of the Disease, APA format (20 points): Cystic Fibrosis is a CFTR mutation that causes alterations in epithelia ion transport on mucosal surfaces, resulting in generalized dysfunction of the exocrine glands. This results in thickened, tenacious secretions in the sweat glands, gastrointestinal tract, pancreas, respiratory tract, and other exocrine tissues. The increased viscosity of these secretions makes them difficult to clear. The sweat glands produce a larger amount of chloride leading to a salty taste in the skin and altercations in electrolyte balance and dehydration. The pancreas intrahepatic bile ducts intestinal glands gall bladder in submaxillary glands become obstructed by viscous mucus and eosinophilic material. Pancreatic enzymes activity is lost in malabsorption of fats proteins and carbohydrates occurs resulting in poor growth and large malodorous stools. Excess mucus is produced by the tracheal bronchial glands. Abnormally thick

mucus plugs the small Airways and then bronchiolitis and further plugging of the air ways occurs.

Pathophysiology References (2) (APA):

Ricci, S. S., Kyle, T., & Carman, S. (2017). *Maternity and pediatric nursing*. Wolters Kluwer.

Active Orders (2 points)

Order(s)	Comments/Results/Completion
Activity:	**Ad lib**
Diet/Nutrition:	**Enfamil neuropro standard, some breast milk, ad lib 10-12 feedings**
Frequent Assessments:	**Asceses Q4 Vitals Q$**
Labs/Diagnostic Tests:	**No new orders**
Treatments:	**IV antibiotics, Albuterol, Ancef, Creon**
Other:	
New Order(s) for Clinical Day	
Order(s)	**Comments/Results/Completion**
None	

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range (specific to the age of the child)	Admission or Prior Value 10-1-20	Today's Value	Reason for Abnormal Value
RBC	**3.02 – 4.22**	**3.43**		
Hgb	**8.9 – 12.7**	**11.4**		
Hct	**26.8 – 37.5**	**33.6**		
Platelets	**229 – 562**	**569**		**CF – these clients have an increased number of circulating platelets**
WBC	**8.14 – 14.99**	**13.86**		
Neutrophils				
Lymphocytes				
Monocytes				
Eosinophils				
Basophils				
Bands				

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission or Prior Value 10-1-20	Today's Value	Reason For Abnormal
Na-	**136 -145**	**139**		

K+	**3.5 – 5.1**	**5**		
Cl-	**98 - 107**	**106**		
Glucose	**60 – 99**	**103**		**CF – pancreas may not be properly working**
BUN	**7 – 18**	**8**		
Creatinine	**0.70 – 1.30**	**<0.15**		**CF – declined hepatic function**
Albumin	**3.4 – 5**	**2.7**		**Recurrent vomiting**
Total Protein	**6.4 – 8.2**	**5.9**		**Recurrent vomiting**
Calcium	**8.5 – 10.1**	**10.4**		**CF – improper digestion**
Bilirubin	**0.2 – 1**	**0.3**		
Alk Phos	**54 – 369**	**261**		
AST	**15 – 37**	**35**		
ALT	**12 – 78**	**43**		
Amylase	**NA**			
Lipase	**NA**			

Other Tests Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Not Performed

Lab Test	Normal Range	Admission or Prior Value	Today's Value	Reason for Abnormal
ESR				
CRP				
Hgb A1c				

TSH				

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Not Preformed

Lab Test	Normal Range	Admission or Prior Value	Today's Value	Reason for Abnormal
Color & Clarity				
pH				
Specific Gravity				
Glucose				
Protein				
Ketones				
WBC				
RBC				
Leukoesterase				

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Not Preformed

Test	Normal Range	Admission or Prior Value	Today's Value	Explanation of Findings
Urine Culture				
Blood Culture				
Sputum Culture				
Stool Culture				
Respiratory ID Panel				

Lab Correlations Reference (APA):

Mayo Clinic Laboratories. (2020). *Pediatric Test Reference Values - Mayo Clinic Laboratories*.

Www.Mayocliniclabs.Com.

https://www.mayocliniclabs.com/test-info/pediatric/refvalues/index.html?alpha=C

Diagnostic Imaging

All Other Diagnostic Tests (5 points): NA

Diagnostic Test Correlation (5 points): NA

Diagnostic Test Reference (APA):

Current Medications (8 points)
****Complete *ALL* of your patient's medications****

Brand/Generic	**Albuterol sulfate AccuNeb**	**Cefazolin Ancef**	**Pancrelipase Creon 6**		
Dose	**2.5mg/3mL**	**138.6mg in sodium chloride 0.9%**	**0.5 capsule**		
Frequency	**Q6H**	**Q8h**	**Q2h With feedings**		
Route	**nebulization**	**IV push**	**Oral**		
Classification	**bronchodilator**	**antibiotic**	**Pancreatic enzyme replacement**		
Mechanism of Action	**Relaxes bronchial smooth muscle cells and inhibits histamine release**	**Interfears with bacterial cell wall synthesis**			
Reason Client Taking	**CF- Thickened screations**	**Possible infection**	**CF – improper pancreatic function**		
Concentration Available	**2.5mg/3mL**	**138.6**	**6,000 – 19,000 – 30,000 unit**		

			capsule		
Safe Dose Range Calculation	**2.5 mg 3-4 times a day**	**90mg/kg/day**	**2,000 – 4,000 units per breast feeding or 120 ml of formula**		
Maximum 24-hour Dose	**10mg/day**	**415.8 mg/day**	**24000 – 48000 units**		
Contraindications (2)	**Hypersensitivity**	**hypersensitivity**	**Acute pancreatitis, hypersensitivity**		
Side Effects/Adverse Reactions (2)	**Hyperglycemia, vomiting**	**Fever, hepatic failure**	**Hyperglycemia, vomiting**		
Nursing Considerations (3)	**Monitor serum potassium levels, be aware of drug tolerance with prolonged use**	**Obtain culture and sensitivity, inject slowly over 3-5 minutes, monitor for nephrotoxicity**	**Brands are not interchangeable, mix powder with fluid or soft nondairy food, give before or with meals and snacks**		
Client Teaching needs (2)	**Do not exceed prescribed dose or frequency, immediately report signs and symptoms of allergic reaction**	**Complete prescribe therapy as indicated, report watery, bloody stools immediately**	**Stools may have a foul smell, do not inhale the powder**		

Medication Reference (APA):

Jones, & Bartlett. (2019). ***2019 Nurse's drug handbook.*** **Jones & Bartlett Learning.**

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness: sleeping** **Orientation:** **Distress: no** **Overall appearance:**	**Client was sleeping at time of assessment, no distress indicated, over all appearance was calm.**
INTEGUMENTARY (2 points): **Skin color: pink, lacy mottling** **Character:** **Temperature: 97.0**	**Pink warm and dry, temperature noted at 97.0 F, client was unswadded and har their arms raised prior to temperature check and was in just a diaper, lacy motting noted on lower**

Turgor: **Rashes: NA** **Bruises: NA** **Wounds: NA** **Braden Score: 16** **Drains present: Y☐ N ☒** **Type:**	**extremities. Skin turgor 2, Braden scale 16**
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:** **Thyroid:**	**Head is symmetrical and midline, ears were not examined, eyes had a little build up in one corner easily removed, nose is symmetrical and midline, no teeth present.**
CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	**Regular rate in rhythm for age, S1 and S2 present, no murmur or gallops noted, pulses equal and strong, capillary refill 2, no edema noted**
RESPIRATORY (2 points): **Accessory muscle use: Y☒ N ☐** **Breath Sounds: Location, character**	**Minimal wheezing on expiration noted and mild costal retractions**
GASTROINTESTINAL (2 points): **Diet at home: Formula/breast milk** **Current diet:Formula/ breast milk** **Height (in cm): 50.8** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒**	**Client received 2 oz feedings and is then placed on the breast for 2-3 minutes every 2-4 hours. Mother supplements with formula because she only produced 0.5-1 oz of milk. Bowel sounds active in all four quadrants, last bowel movement was 10-1-20, no masses noted upon palpation.**

Type:	
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**Clients mother described urine as pale yellow, without odor**
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score: 2** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	**Client moved all extremities equally, strength was hard to assess approximately equal, fall score 2, in crib when not being held**
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**Moves all extremities well, PERLA not assessed client was sleeping, strength was hard to assess approximately equal, to young to assess orientation, mental status, and speech. Sensory intact, responded to touch**
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s) of caregiver(s):** **Social needs (transportation, food, medication assistance, home equipment/care):** **Personal/Family Data (Think about home environment, family structure, and available family support):**	**Parents are present with client, they feel they are managing patient's needs well, understand importance of medication therapy, have good home support, are tired at this time.**

Vital Signs, 1 set (2.5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0900	**148**	**86/48** **MAP 60**	**48**	**97.0** **Axillary, infants' arms were up and unswaddled**	**100% RA**

Normal Vital Sign Ranges (2.5 points)
****Need to be specific to the age of the child****

Pulse Rate	**100-180 awake, 90- 160 sleeping**
Blood Pressure	**72-104 systolic 37-56 diastolic**
Respiratory Rate	**30 – 55**
Temperature	**>97.6**
Oxygen Saturation	**>90%**

Normal Vital Sign Range Reference (APA): PALS provided by instructor

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	**rFLACC**	**NA**	**NA**	**NA**	**NA**
Evaluation of pain status *after*	**rFLACC**	**NA**	**NA**	**NA**	**NA**

interventio n					
Precipitating factors: **Physiological/behavioral signs:**					

Intake and Output (1 points)

Intake (in mL)	**Output (in mL)**
60 mL feeding, on breast for 1-2 minutes **x2** **6.95 mL - infusion** **Total 126.95 mL**	**323 mL**

Developmental Assessment (6 points)
Be sure to highlight the achievements of any milestone if noted in y our child. Be sure to highlight any use of diversional activity if utilized during clinical. There should be a minimum of 3 descriptors under each heading

Age Appropriate Growth & Development Milestones

1. **Root**
    a. **Infants turn to side the side the cheek is touched on**
    b. **Searching with mouth**
2. **Suck**
    a. **Reflexive sucking when nipple or finger is placed in mouth**
3. **Palmar grasp**
    a. **Reflexively grasps when palm is touched**

Age Appropriate Diversional Activities

1. **Skin to skin**
    a. **Thermoregulation**
2. **Swing/rocking**

a. **comfort**

3. **Sucking**
    a. **Used to sooth client while preforming assessment**

Psychosocial Development:

Which of Erikson's stages does this child fit? Trust vs Mistrust

What behaviors would you expect? Caregiver response to infant needs when crying or fussy.

What did you observe? The mother held the baby for 30-45 minutes after feeding to provide comfort before returning to crib. After feeding the mother stated she moves the client to breast if he is still searching for food. She only produces approximately 0.5 -1 oz of milk.

Cognitive Development:

Which stage does this child fit, using Piaget as a reference? Sensory motor - use of reflexes

What behaviors would you expect? Sucking brings the pleasure of ingestion nutrition. Infant begins to gain control over reflexes and recognizes familiar objects, odors, and sounds.

What did you observe? The infant was sucking on their pacifier while sleeping.

Vocalization/Vocabulary:

Development expected for child's age and any concerns? Crying, fussing, cooing
Any concerns regarding growth and development? Client appears to be at an appropriate growth and developmental stage.

Nursing Diagnosis (15 points)

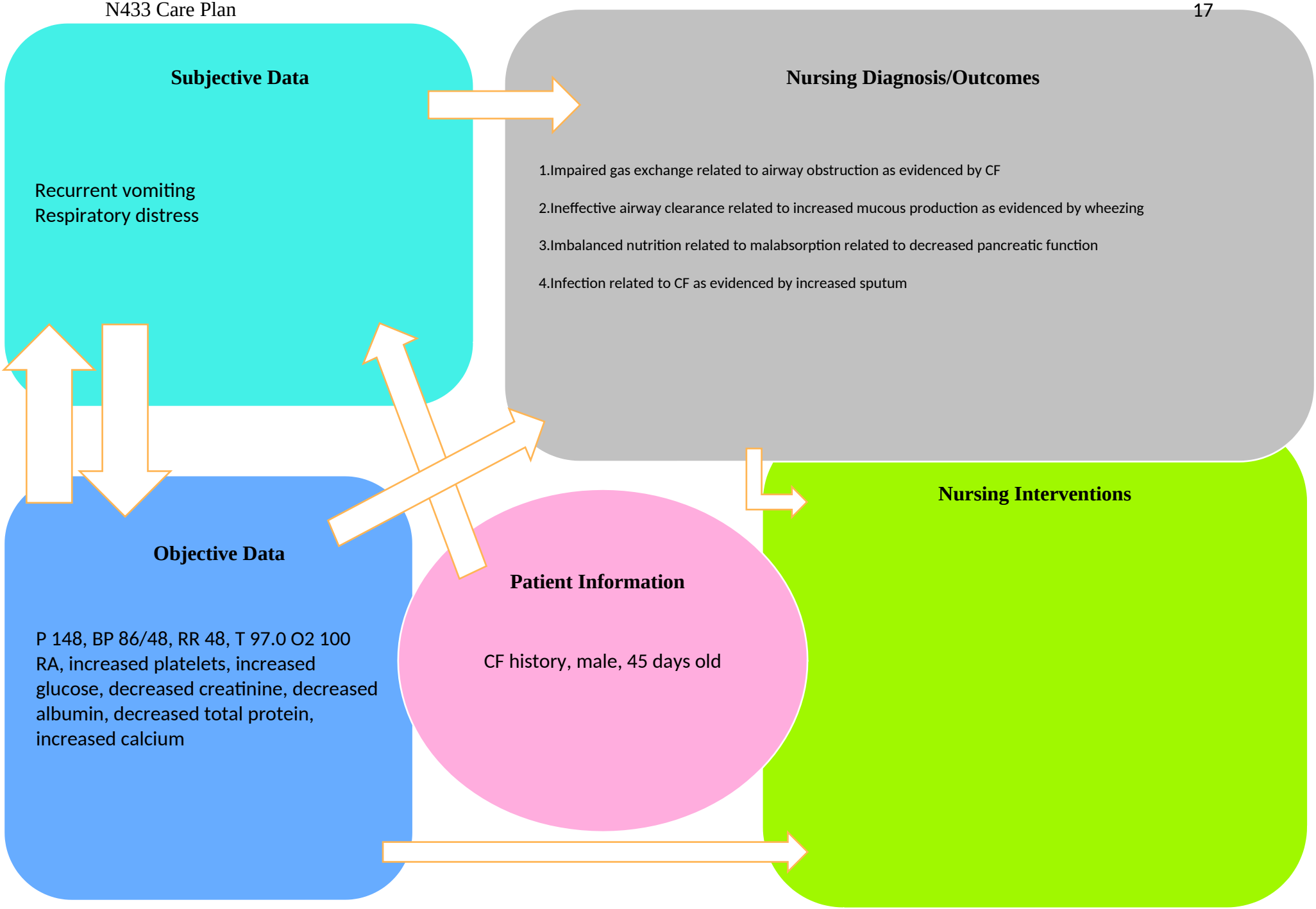
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired gas exchange related to airway obstruction as evidenced by CF		**1.** **2.**	
2. Ineffective airway clearance related to increased mucous production as evidenced by wheezing		**1.** **2.**	
3. Imbalanced nutrition related to malabsorption related to decreased pancreatic function		**1.** **2.**	
4. Infection related to CF as evidenced by increased sputum		**1.** **2.**	

Other References (APA):

Nanda. (2018). ***Welcome to NANDA International Defining the Knowledge of Nursing | Just another WordPress site*****. Nanda.Org. https://nanda.org/**

Concept Map (20 Points):


Subjective Data
Recurrent vomiting
Respiratory distress
Nursing Diagnosis/Outcomes
1.Impaired gas exchange related to airway obstruction as evidenced by CF
2.Ineffective airway clearance related to increased mucous production as evidenced by wheezing
3.Imbalanced nutrition related to malabsorption related to decreased pancreatic function
4.Infection related to CF as evidenced by increased sputum
Objective Data
P 148, BP 86/48, RR 48, T 97.0 O2 100 RA, increased platelets, increased glucose, decreased creatinine, decreased albumin, decreased total protein, increased calcium
Patient Information
CF history, male, 45 days old
Nursing Interventions