

*Appendix*  
*Instrument used in the expert validation*

<b>1) DEFINING CHARACTERISTICS OF EXCESS FLUID VOLUME (00026)</b>					
<b>Domain 2:</b> Nutrition					
<b>Class 5:</b> Hydration					
<b>Definition:</b> Surplus intake and/or retention of fluid.					
<b>1. ALTERATION IN URINE SPECIFIC GRAVITY</b>					
<b>Operational definition:</b> The solutes found in the urine are creatinine, chlorides, glucose, phosphates, proteins, sodium, sulfates, urea, and uric acid. The normal range for urine specific gravity is 1.002 to 1.028 g/mL increasing by 0.001 for each increment from 35 to 40mosmol/L in urine osmolarity. The defining characteristic will be present if urine-specific gravity is greater than 1.028 g/ml.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>2. ALTERATION IN BLOOD PRESSURE</b>					
<b>Operational definition:</b> The defining characteristic Alteration in blood pressure will be present if blood pressure is elevated above the normal range.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>3. ALTERATION IN PULMONARY ARTERY PRESSURE</b>					
<b>Operational definition:</b> The normal ranges are 15 to 30mmHg for pulmonary artery systolic pressure, 8-15mmHg for pulmonary artery diastolic pressure, and 16-25mmHg for mean pulmonary artery pressure. The defining characteristic Alteration in pulmonary artery pressure will be present if the pulmonary artery pressure is not within the normal ranges mentioned above.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>4. ALTERATION IN MENTAL STATUS</b>					
<b>Operational definition:</b> There are several tests to assess the mental function in older adults, including the Mini-Mental State Examination, which is quite useful for this type of measurement. The highest possible score is 30, and scores above 26 indicate normal mental status. Values below 24 indicate cognitive impairment (dementia), and values between 24 and 26 are considered borderline.  The defining characteristic Alteration in mental status will be present if a score below 26 is obtained.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>5. ALTERATION IN RESPIRATORY PATTERN</b>					
<b>Operational definition:</b> The normal range for respiratory rate is 12 to 20 breaths per minute. The defining characteristic Alteration in respiratory pattern will be present if the patient has an abnormal breathing pattern and a respiratory rate that is not within the normal range mentioned above.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>6. ANASARCA</b>					

<b>Operational definition:</b> The defining characteristic Anasarca will be present if periorbital edema is present, the abdomen is ascitic, and the presence of pulmonary rales is identified.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>7. ANXIETY</b>					
<b>Operational definition:</b> There is a prevalence of mood disorders in kidney patients. The Hospital Anxiety and Depression Scale (HADS) can assess anxiety with 14 items, 7 to assess anxiety and 7 to assess depression. Each item can be scored from zero to three, making up a maximum of 21 points. Scores lower than 9 for each subscale indicate the absence of anxiety. The defining characteristic Anxiety will be present if a score above 9 is obtained.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>8. INCREASED CENTRAL VENOUS PRESSURE</b>					
<b>Operational definition:</b> The normal CVP ranges from 2 to 8mmHg. The defining characteristic Increased central venous pressure will be present if a CVP value greater than 8 mmHg is obtained.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>9. AZOTEMIA</b>					
<b>Operational definition:</b> The normal urea value ranges from 20-40mg/dl. In most clinical analyses, the normal range for blood creatinine is 0.6 to 1.3mg/dl. The serum creatinine level depends on age, sex, nutritional status, and muscle mass. The defining characteristic Azotemia will be present if the values of the monthly exams are not within the normal ranges.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>10. PULMONARY CONGESTION</b>					
<b>Operational definition:</b> The defining characteristic Pulmonary congestion will be present in the presence of crackles on auscultation, and/or the patient reports dyspnea, orthopnea, and paroxysmal nocturnal dyspnea.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>11. PLEURAL EFFUSION</b>					
<b>Operational definition:</b> The defining characteristic Pleural effusion will be present in the presence of decreased tactile fremitus on palpation combined with decreased pulmonary expansibility and diminished or absent breath sounds.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>12. ELECTROLYTE IMBALANCE</b>					
<b>Operational definition:</b> This defining characteristic will be present if electrolytes such as sodium, potassium, magnesium, and phosphorus are altered. The normal sodium concentration ranges between 135 and 145 mEq/L. Potassium is the intracellular cation present in greater quantity in the body, and its normal serum concentration is 3.5 to 5.0 mEq/L. Magnesium is the second most prevalent intracellular cation, and its normal range is 1.8 to 2.3 mg/dL. Phosphorus is the main intracellular anion.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>13. DYSPNEA</b>					

<b>Operational definition:</b> The defining characteristic Dyspnea is identified through inspection and will be present in the presence of respiratory distress and accessory muscle use.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>14. PAROXYSMAL NOCTURNAL DYSPNEA</b>					
<b>Operational definition:</b> This defining characteristic will be present if the patient reports symptoms and signs of choking and coughing, causing him to wake up at night and forcing him to sit upright.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>15. JUGULAR VEIN DISTENTION</b>					
<b>Operational definition:</b> This defining characteristic will be present if the jugular vein is turgid when the patient assumes the seated position.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>16. EDEMA</b>					
<b>Operational definition:</b> This defining characteristic will be present in the presence of pitting after pressure, classified into 1+ (2mm), 2+ (4mm), 3+ (6mm), and 4+ (8mm).	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>17. WEIGHT GAIN OVER SHORT PERIOD OF TIME</b>					
<b>Operational definition:</b> This defining characteristic will be present if the patient presents weight gain higher than 3% compared with the last assessment.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>18. DECREASE IN HEMATOCRIT</b>					
<b>Operational definition:</b> The defining characteristic Decrease in hematocrit will be present if the patient has a monthly hematocrit level below the range of 38.3 to 48.6% in men and 35.3 to 44.9% in women.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>19. DECREASE IN HEMOGLOBIN</b>					
<b>Operational definition:</b> The defining characteristic Decrease in hemoglobin will be present if the patient has a monthly hemoglobin level below the range of 13.5 to 18 g/dl in men and 11.5 to 16.4g/dl in women.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>20. HEPATOMEGALY</b>					
<b>Operational definition:</b> The defining characteristic Hepatomegaly is identified through physical examination, imaging, or biochemical examination showing an enlargement of the liver in abnormal proportions.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>21. INTAKE EXCEEDS OUTPUT</b>					
<b>Operational definition:</b> The defining characteristic Intake exceeds output will be present if the patient presents fluid imbalance when the fluid intake is greater than the output (more than 500ml per day).	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant

<b>22. RESTLESSNESS</b>					
<b>Operational definition:</b> The defining characteristic Restlessness will be present when the examiner observes discomfort associated with psychomotor agitation.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>23. OLIGURIA</b>					
<b>Operational definition:</b> The defining characteristic Oliguria will be present when the 24-h urine production is below 400 mL per day.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>24. ORTHOPNEA</b>					
<b>Operational definition:</b> The defining characteristic will be present if the patient reports that he/she has to use one or more pillows to get rid of the sensation of breathlessness or has to sleep while sitting up.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>25. PRESENCE OF S3 HEART SOUND</b>					
<b>Operational definition:</b> The defining characteristic will be present in the presence of the third heart sound (S3) heart sound during the clinical examination.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>26. POSITIVE HEPATOJUGULAR REFLEX</b>					
<b>Operational definition:</b> The assessment of the hepatojugular reflex is made by positioning the patient so that the jugular venous pressure can be seen. A steady abdominal pressure is applied for 10 seconds, and the jugular vein is observed for 15 seconds. The defining characteristic Positive hepatojugular reflex will be present if the jugular venous pressure remains elevated for more than 10 seconds.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>27. ADVENTITIOUS BREATH SOUNDS</b>					
<b>Operational definition:</b> The defining characteristic Adventitious breath sounds will be present if such breath sounds are heard during the auscultation of the lungs.	1- Not relevant	2- Fairly irrelevant	3- Somewhat relevant	4- Fairly relevant	5- Very relevant
<b>Justification, suggestions, or other considerations</b>					

<b>2) INDICATORS OF THE NURSING OUTCOME FLUID BALANCE (0601)</b>					
<b>Domain:</b> Physiological: Complex (II)					
<b>Class:</b> Fluids & Electrolytes (G)					
<b>Definition:</b> Water balance in the intracellular and extracellular compartments of the body.					
<b>1. BLOOD PRESSURE (060101)</b>					
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised					
<b>Operational Definition</b>	Determine the patient's arm circumference and select the appropriate size cuff for the arm. Then place it, without leaving any gaps, 2 to 3 cm above the cubital fossa, with the midpoint of the cuff over the brachial artery. Estimate the SBP by palpating the radial pulse. Palpate the brachial artery in the cubital fossa, place the bell or diaphragm of the stethoscope without excessive compression, and rapidly inflate until it exceeds 20 to 30 mmHg of the estimated SBP level obtained by palpation. Proceed with deflation slowly and determine SBP by auscultation of the first sound (phase I of Korotkoff's sounds) and, then slightly increase deflation speed to determine the DBP in the disappearance of sounds (phase V of Korotkoff). Auscultate about 20 to 30 mmHg below the last sound to confirm its disappearance and then proceed to rapid and complete deflation. If the beats persist until the zero level, determine the DBP considering the muffled sounds (phase IV of Korotkoff) and record SBP/DBP/zero values. Perform at least two measurements, with an interval of one minute between them.			<b>Operational Magnitude</b>	
				1	Systolic: $\leq 50$ or $\geq 180$ mmHg Diastolic: $\leq 40$ or $\geq 110$ mmHg
				2	Systolic: 51-60 or 160-179mmHg Diastolic: 41-50 or 100-109mmHg
				3	Systolic: 61-70 or 140-159mmHg Diastolic: 51-60 or 90-99mmHg
				4	Systolic: 71-79 or 120-139mmHg Diastolic: 61-69 or 80-89mmHg
				5	Systolic: 80-119mmHg Diastolic: 70-79mmHg
<b>Assessment</b>			<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>					
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1	
<b>Justification, suggestions, or other considerations</b>					
<b>2. RADIAL PULSE RATE (060122)</b>					
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised					
<b>Operational Definition</b>	Palpate the radial artery using the digital pulp of the index and middle fingers while the thumb is supported on the back of the patient's wrist, with the hand at rest in a supine position. With the help of a watch, you must count the number of pulses during one minute.			<b>Operational Magnitude</b>	
				1	Bradycardia: $\leq 39$ bpm Tachycardia: $\geq 300$ bpm
				2	Bradycardia: 40 – 44 bpm Tachycardia: 251 – 299 bpm
				3	Bradycardia: 45 – 50 bpm Tachycardia: 151 – 250 bpm
				4	Bradycardia: 51 – 59 bpm Tachycardia: 101 – 150 bpm
				5	60 - 100 bpm Bradycardia: $\leq 39$ bpm
<b>Assessment</b>			<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>					
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1	
<b>Justification, suggestions, or other considerations</b>					
<b>3. MEAN ARTERIAL PRESSURE (060102)</b>					
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised					
<b>Operational</b>	The invasive assessment of the mean arterial pressure is			<b>Operational Magnitude</b>	
				1	$\leq 50$ mmHg

<b>Definition</b>	made through the puncture of peripheral or central arteries and connection to a reading system. In the non-invasive method, the MAP is measured through the auscultatory BP measurement, known as Korotkoff sounds, or computerized equipment that measures at pre-defined intervals.		2	51 - 56 mmHg
			3	57- 63 mmHg
			4	64 - 69 mmHg
			5	70 - 100 mmHg
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0- Not Adequate 1- Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>4. CENTRAL VENOUS PRESSURE (060103)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	CVP measurement is performed using a deep venous catheter positioned in the superior vena cava through connection to a monitoring system and an electronic pressure transducer connected to a multiparametric vital sign monitor with an invasive pressure channel curve. The normal CVP ranges between 2mmHg and 8 mmHg.		<b>Operational Magnitude</b>	
			1	12 - 15 mmHg
			2	10 - 11 mmHg
			3	9 - 10 mmHg
			4	8 - 9 mmHg
5	2 - 8 mmHg			
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0- Not Adequate 1- Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>5. PULMONARY ARTERY PRESSURE (060104)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	The assessment can be carried out directly by introducing a Swan-Ganz catheter in the subclavian and jugular vein, advanced with the aid of radioscopy until reaching the pulmonary artery, where the direct measurement is performed. The assessment must be performed at rest and in a supine position, preferably in a hemodynamics room, with ultrasound-guided and fluoroscopy-guided insertion.		<b>Operational Magnitude</b>	
			1	PAP > 65 mmHg
			2	PAP 55 - 64 mmHg
			3	PAP 41 - 55 mmHg
			4	PAP 25 - 40 mmHg
5	PAP < 25 mmHg			
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0- Not Adequate 1- Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>6. PERIPHERAL PULSES (060105)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	Palpate the radial artery using the pulps of the index and middle fingers, varying the compression force until the maximum impulse is obtained. The thumb gently attaches to the back of the patient's wrist, which should be placed in the supine position, and the examiner uses the right hand to examine the patient's left wrist and vice versa. Pulse amplitude is graded from + to ++++ and may vary from examiner to examiner.		<b>Operational Magnitude</b>	
			1	Absent pulse 0
			2	Very weak pulse +
			3	Weak pulse or pulse with decreased amplitude ++
			4	Moderate pulse amplitude +++
5	normal pulse ++++			
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		

Evaluation by experts				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>7. 24-HOUR INTAKE AND OUTPUT BALANCE (060107)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	Recording all fluid intake and output over 24 hours is an important aspect of fluid balance. The assessment is performed by daily calculation based on accurate measurement and recording of the difference between the amount of fluids administered orally, enterally, and/or parenterally and the sum of the amount of measurable fluids eliminated or lost. The two measurements should be approximately equal when the fluid balance is normal. The fluid balance is considered positive when there is a predominance of the input and negative when the fluid loss is greater.		<b>Operational Magnitude</b>	
			1	≤ - 2001 ml/day or ≥ 2001 ml/day
			2	- 2000 to -1501 ml/day or 1501 to 2000 ml/day
			3	-1500 to -1001 ml/day or 1001 to 1500 ml/day
			4	-1000 to -501 ml/day or 501 to 1000 ml/day
			5	- 500 to + 500 ml/day
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
Evaluation by experts				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>8. STABLE BODY WEIGHT (060109)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	A standardized scale or an electronic scale is used to measure body weight. Instruct the patient to remove shoes or heavy clothing before stepping on the scale. When a sequence of repeated weighings is necessary, they must be carried out at approximately the same time of day and with the same type of clothes worn each time, as this allows the current weight to be compared with that of the previous assessment.		<b>Operational Magnitude</b>	
			1	Loss > 15% or gain ≥ 8%
			2	8-14% loss or 6-7% gain
			3	5-8% loss or 4-5% gain
			4	1-4% loss or up to 3% gain
			5	No weight change
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
Evaluation by experts				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>9. SKIN TURGOR (060116)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	Skin turgor is assessed by pinching a skin fold covering the subcutaneous tissue with the thumb and forefinger. Skin with normal turgor snaps easily and immediately to its normal position. A decreased skin turgor is identified when the skin fold returns slowly to its normal position, indicating decreased skin elasticity and possible dehydration.		<b>Operational Magnitude</b>	
			1	Skin return ≥ 5 seconds
			2	Skin return in 4 seconds
			3	Skin return in 3 seconds
			4	Skin return in 2 seconds
			5	Immediate skin return
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
Evaluation by experts				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1

<b>Justification, suggestions, or other considerations</b>				
<b>10. MOIST MUCOUS MEMBRANES (060117)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	The assessment consists of inspecting the lips, which should present a smooth, pink, moist, symmetrical, and smooth aspect. A decreased oral mucous moisture may be indicative of hydro electrolytic disorders.			<b>Operational Magnitude</b>
				1 Dry, with redness, ulcers, or bleeding.
				2 Dry, with redness, cracks, and/or crusts.
				3 Dry, with redness, chapped, and/or wrinkled lips.
				4 Slightly dry, pink, with slightly wrinkled lips.
				5 Moist, pink, and smooth.
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>11. SERUM ELECTROLYTES (060118)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	Serum electrolytes are assessed through blood tests.			<b>Operational Magnitude</b>
				1 Sodium: - $\geq 160$ mEq/l Potassium: $\geq 10.0$ mEq/l Magnesium: $\geq 12.5$ to 32 mg/Dl Phosphorus: $\geq 10.6$ mg/Dl Calcium: $< 7.0$ mg/Dl
				2 Sodium: 155 - 159 mEq/l Potassium: 7.0 - 9.9 mEq/l Magnesium: 8.6 - 12.5 mg/Dl Phosphorus: 8.6 - 10.5 mg/Dl Calcium: 7.0 - 7.4 mg/Dl
				3 Sodium: - 151 – 154 mEq/l Potassium: 6.1 – 7.0 mEq/l Magnesium: 4.0 – 8.5 mg/Dl Phosphorus: 6.6 - 8.5 mg/Dl Calcium: 7.5 - 7.9 mg/Dl
				4 Sodium: 146 - 150 mEq/l Potassium: 5.1 - 6.0 mEq/l Magnesium: 2.4 - 3.9 mg/Dl Phosphorus: 4.6 - 6.5 mg/Dl Calcium: 8.0 - 8.4 mg/Dl
				5 Sodium: 135 - 145 mEq/l Potassium: 3.5 - 5.0 mEq/l Magnesium: 1.8 - 2.3 mg/Dl Phosphorus: 2.7 - 4.5 mg/Dl Calcium: 8.5 - 10.5 mg/Dl
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>12. HEMATOCRIT (060119)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	The evaluation of this indicator must be carried out through the analysis of the monthly exams of the patient on hemodialysis.			<b>Operational Magnitude</b>
				1 Men - $\leq 32.2\%$ Women - $\leq 29.2\%$
				2 Men - 32.3 to 34.2% Women - 29.3 to 31.2%
				3 Men - 34.3 to 36.2%



					4	Women - 31.3 to 33.2% Men - 36.3 to 38.2%
					5	Women - 33.3 to 35.2% Men - 38.3 to 48.6%
						Women - 35.3 to 44.9%
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5				
<b>Evaluation by experts</b>						
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1		
<b>Justification, suggestions, or other considerations</b>						
<b>13. URINE SPECIFIC GRAVITY (060120)</b>						
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised						
<b>Operational Definition</b>	The assessment of urine-specific gravity is performed using dry chemistry methods, including reagent strips, urinary densimeter, or refractometry. The evaluation of this indicator must be carried out through an analysis of monthly exams of hemodialysis patients.				<b>Operational Magnitude</b>	
					1	≥ 1.040 g/mL
					2	1,036 to 1,039 g/mL
					3	1,032 to 1,035 g/mL
					4	1,029 to 1,031 g/mL
					5	1,002 - 1,028 g/mL
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5				
<b>Evaluation by experts</b>						
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1		
<b>Justification, suggestions, or other considerations</b>						
<b>14. ORTHOSTATIC HYPOTENSION (060106)</b>						
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised						
<b>Operational Definition</b>	Determine the patient's blood pressure in the supine position after 2 to 3 min of rest; then, take new measures with the patient sitting and standing, with an interval of 1 and 3 minutes. Measure the blood pressure again after the patient walks a few steps.				<b>Operational Magnitude</b>	
					1	Reduction ≥20mmHg in SBP and ≥10mmHg in DBP
					2	Reduction of 15-19 mmHg in SBP and 8-9 mmHg in DBP
					3	10-14mmHg reduction in SBP and 7mmHg in DBP
					4	5-9mmHg reduction in SBP and 5-6mmHg in DBP
					5	Variation between systolic and diastolic values ≤ 4mmHg.
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5				
<b>Evaluation by experts</b>						
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1		
<b>Justification, suggestions, or other considerations</b>						
<b>15. ADVENTITIOUS BREATH SOUNDS (060108)</b>						
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised						
<b>Operational Definition</b>	Perform pulmonary auscultation to identify sounds suggestive of the presence of congestion or pulmonary fluid. The examination should be started from the anterior part of the thorax, from the apices of the supraventricular regions downwards, up to the sixth rib. A stethoscope is used to auscultate the complete breath at each location symmetrically. The patient must have the thoracic region naked and breathe slowly, deeply, and with the mouth slightly open.				<b>Operational Magnitude</b>	
					1	Present in the whole pulmonary regions of both lungs.
					2	Present in the whole pulmonary regions of only one lung.
					3	Present in one or more than one region in one or both lungs.
					4	Present in only one region of one lung.
					5	Absent adventitious breath sound.
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5				
<b>Evaluation by experts</b>						

<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>16. ASCITES (060110)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	The assessment can be done using two techniques: 1) By percussing the abdomen with the patient positioned in lateral decubitus. The difference between the tympanic and the dull sound can be perceived due to the gravitational displacement of the liquid content to the lower peritoneal cavity and the gas content of the colon in the upper peritoneal cavity. 2) By performing the liquid wave test, which is performed by having the patient (or a colleague) push their hands down on the midline of the abdomen. The examiner then taps one flank while feeling on the other flank for the tap.		<b>Operational Magnitude</b>	
			1	Protuberant abdomen and dull sound during percussion.
			2	Important change from tympanic to dull sound during percussion.
			3	Moderate change from tympanic to dull sound during percussion.
			4	Slight change in sound from tympanic to dull during percussion.
			5	Absent
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>17. NECK VEIN DISTENSION (060111)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	Lie the patient supine with the head elevated to 45° and compress the abdomen firmly for more than one minute while observing the jugular veins.		<b>Operational Magnitude</b>	
			1	Neck veins distended as high as the angle of the jaw.
			2	Distension > 6cm and ≤7cm.
			3	Distension > 5 cm to ≤6 cm.
			4	Distension > 4 cm to ≤5 cm
			5	Distension ≤ 4 cm.
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>18. PERIPHERAL EDEMA (060112)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	Press the swollen area firmly with your thumb for a few seconds and release. The depression of the sulcus will determine the degree of edema at 1+ (2mm depth), 2+ (4mm deep), 3+ (6mm deep) and 4+ (8mm deep).		<b>Operational Magnitude</b>	
			1	locker sign 4+
			2	locker sign 3+
			3	locker sign 2+
			4	locker sign 1+
			5	absent edema
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>19. SOFT, SUNKEN EYEBALLS (060113)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				

<b>Operational Definition</b>	The evaluation consists of inspecting the change in depth between the outer part of the eyelids and the edge of the eye socket. There is the total delimitation of the ocular orbit in extremely sunken eyes, while in patients with sunken eyes, the delimitation is only the upper portion. Moisture and tear production must also be assessed.			<b>Operational Magnitude</b>	
				1	Extremely sunken eyes, with low production of tears.
				2	Sunken eyes, with low production of tears.
				3	Sunken eyes, with low production of tears, but still bright.
				4	Sunken but bright eyes, with normal production of tears.
5	No alterations in the eyes.				
<b>Assessment</b>			<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>					
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1	
<b>Justification, suggestions, or other considerations</b>					
<b>20. CONFUSION (060114)</b>					
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised					
<b>Operational Definition</b>	Apply the Glasgow Coma Scale composed of eye opening, verbal response, and motor response. Assign the score related to the best response obtained in each indicator and sum them up at the end. Subsequently, the pupil reactivity is evaluated and subtracted from the previous parameters' results. <b>Eye opening:</b> Spontaneous 4 Open to verbal command 3 Open to pain 2 No eye opening 1 <b>Verbal response:</b> Oriented 5 Confused 4 Inappropriate words 3 Incomprehensible sounds 2 No verbal response 1 <b>Motor response</b> Follow commands 6 Localizes to pain 5 Withdrawals from pain 4 Flexes to pain 3 Extends to pain 2 No movement 1 <b>Pupil reactivity</b> Both pupils 2 One pupil 1 Neither pupil 0			<b>Operational Magnitude</b>	
				1	≤3
				2	4 - 8
				3	9 - 12
				4	13 - 14
5	15				
<b>Assessment</b>			<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>					
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1	
<b>Justification, suggestions, or other considerations</b>					
<b>21. THIRST (060115)</b>					
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised					
<b>Operational Definition</b>	Ask the patient to quantify the thirst intensity by choosing a number from 1 to 5, with 1 being intense thirst and 5 no thirst.			<b>Operational Magnitude</b>	
				1	Severe thirst
				2	Intense thirst

			3	Moderate thirst
			4	Mild thirst
			5	Absent thirst
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>22. MUSCLE CRAMPS (060123)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	Ask the patient the number of cramps per day, location, intensity and duration.		<b>Operational Magnitude</b>	
			1	≥ 10
			2	7 - 9
			3	4 - 6
			4	1 - 3
			5	None
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				
<b>23. DIZZINESS (060124)</b>				
<b>Rating:</b> 1- Severely compromised, 2- Substantially compromised, 3- Moderately compromised, 4- Mildly compromised, and 5- Not compromised				
<b>Operational Definition</b>	Ask the patient about the number of episodes of dizziness per day, their intensity, and duration.		<b>Operational Magnitude</b>	
			1	≥4 dizziness episodes.
			2	3 dizziness episodes.
			3	2 dizziness episodes.
			4	1 dizziness episode.
			5	No dizziness episodes.
<b>Assessment</b>		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
<b>Evaluation by experts</b>				
<b>Criteria:</b> 0-Not Adequate 1-Adequate	<b>Content:</b> ( ) 0 ( ) 1	<b>Form:</b> ( ) 0 ( ) 1	<b>Clarity:</b> ( ) 0 ( ) 1	<b>Objectivity:</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations</b>				

<b>3) NURSING INTERVENTION FLUID MANAGEMENT (4120)</b>				
<b>Definition:</b> Promotion of fluid balance and prevention of complications resulting from abnormal or undesired fluid levels.				
<b>ACTIVITIES:</b>				
✓ <b>WEIGH DAILY AND MONITOR TRENDS</b>				
1. Explain the difference between dry weight and interdialytic weight gain. <ul style="list-style-type: none"> <li>• Dry weight: is the weight that must be reached at the end of the hemodialysis session. It corresponds to the ideal weight, in which the patient does not present edema and has normal blood pressure parameters.</li> <li>• Interdialytic weight gain: weight gain between hemodialysis sessions that occurs due to excessive fluid volume.</li> </ul>				
2. Explain the factors related to interdialytic weight gain: <ul style="list-style-type: none"> <li>• Excessive fluid intake;</li> <li>• Sodium-rich diet;</li> <li>• Nutrition as prescribed by the doctor and nutritionist for the chronic renal patient on hemodialysis</li> </ul>				

3. Explain the consequences of interdialytic weight gain:				
<ul style="list-style-type: none"> <li>• It makes hemodialysis difficult;</li> <li>• It can cause complications such as hypotension, muscle cramps, nausea, headache, acute pulmonary edema, high blood pressure, and cardiovascular complications.</li> </ul>				
4. Create a diary of notes and guide the patient to perform a daily weighing record. Ask the patient to present this data to the responsible professional in the hemodialysis sessions.				
5. Weighing procedure:				
<ul style="list-style-type: none"> <li>• Use a standard scale or an electronic scale.</li> <li>• Instruct the patient to remove shoes or heavy clothes before stepping on the scale.</li> <li>• Carry out the weighing, if possible, at the same time of day and with the same type of clothing.</li> </ul>				
6. The responsible professional must compare the current weight with the previous consultation.				
7. Record in the patient's medical record				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				
<b>✓ MAINTAIN ACCURATE INTAKE AND OUTPUT RECORD</b>				
1. Create a diary of notes and guide the patient to record daily fluid intake and output. Ask the patient to present this data to the responsible professional in the hemodialysis sessions.				
2. Advise the patient about the importance of keeping track of the amount of fluids ingested:				
<ul style="list-style-type: none"> <li>• Maintenance of the fluid balance.</li> <li>• An early indicator of the occurrence of renal and cardiovascular complications.</li> <li>• Adjustment of fluid therapy and nutrition volumes.</li> </ul>				
3. Explain that fluid intake is recommended according to urinary excretion. The allowed amount considers the 24-hour urine volume plus 500 ml or as prescribed by the doctor.				
4. Emphasize to the patient that the intake of coffee, tea, soup, ice cream, coconut water, fruits, and vegetables high in water such as watermelon, pineapple, orange, tomato, lettuce, should be included in the total volume of liquids ingested.				
5. Assess the fluid status and identify signs suggestive of fluid imbalance.				
6. Carry out a nutritional program that ensures adequate intake within the limits of the therapeutic regimen.				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				
<b>✓ MONITOR LABORATORY RESULTS RELEVANT TO FLUID RETENTION</b>				
1. Monitor tests for increased urine specific gravity, decreased hematocrit, and increased urea and creatinine levels.				
2. Check sequential test results for trends and extreme changes.				
3. Evaluate indicators of fluid overload/retention (edema, neck vein distention).				
4. Fluid/Electrolyte Control.				
5. Monitor serum electrolyte levels and those relevant to fluid retention.				
6. Observe signs and symptoms of hydro electrolyte imbalance: cramps, arrhythmias, neurological changes, edema.				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1

<b>Justification, suggestions, or other considerations.</b>				
✓ <b>MONITOR HEMODYNAMIC STATUS, INCLUDING CENTRAL VENOUS PRESSURE, MEAN ARTERIAL PRESSURE, AND PULMONARY ARTERY PRESSURE</b>				
1. Monitor non-invasive vital parameters: temperature, pulse, blood pressure, respiration, continuous electrocardiogram, pulse oximetry, and cardiac monitoring.				
2. In case of compromised stability, evaluate invasive parameters: central venous pressure, pulmonary arterial pressure, and pulmonary arterial pressure.				
3. Care for monitoring mean arterial pressure: <ul style="list-style-type: none"> <li>• Keep dry, sterile, compressive dressings in place.</li> <li>• Immobilize wrist and observe perfusion and peripheral saturation.</li> <li>• Keep the limb warm and in a functional position.</li> <li>• Compute the hydro electrolytic balance, the volume of liquid used to wash the system.</li> <li>• Use an aseptic technique for handling the system.</li> </ul>				
4. Care for monitoring central venous pressure: <ul style="list-style-type: none"> <li>• Keep the patient in the supine position, without the pillow.</li> <li>• Make sure the transducer is positioned correctly.</li> <li>• Identify the hydrostatic zero.</li> <li>• Check the length of the circuit (up to 110 cm).</li> <li>• Check the filling of the catheter with fluids (removing bubbles and clots).</li> <li>• Carry out the Flush Test.</li> <li>• "Zero" the system to atmospheric pressure.</li> <li>• Check the positioning of the central venous catheter tip.</li> <li>• Identify central venous pressure waves.</li> <li>• Locate the "A" component of central venous pressure/diastolic blood pressure.</li> <li>• Perform the assessment at the end of expiration, both in intubated and spontaneously ventilated patients.</li> <li>• To check the morphology of the curve.</li> </ul>				
5. Care for monitoring pulmonary artery pressure: <ul style="list-style-type: none"> <li>• Keep the patient in the supine position, without the pillow.</li> <li>• Make sure the transducer is correctly positioned concerning the decubitus.</li> <li>• Identify the hydrostatic zero.</li> <li>• Check the circuit length (up to 110 cm).</li> <li>• Examine the catheter for complete filling with fluid (removing bubbles and clots).</li> <li>• Perform "Flush Test".</li> <li>• "Zero" with atmospheric pressure.</li> <li>• Identify pulmonary artery catheter waves: diastolic blood pressure, right ventricular pressure, pulmonary artery pressure, and pulmonary artery occlusion pressure.</li> <li>• Try to relate the "a" wave of the pressure tracing with the end of the P wave of the electrocardiogram tracing.</li> <li>• Perform the assessment at the end of expiration, both in intubated patients and those with spontaneous ventilation.</li> <li>• Check the morphology of the curves (to rule out under and overdamping) and their relationship to the respiratory cycle.</li> <li>• Check catheter tip positioning using chest X-ray.</li> </ul>				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				
✓ <b>MONITOR VITAL SIGNS, AS APPROPRIATE</b>				
1. Monitor blood pressure, breathing pattern, pulse, and heart rate and observe trends.				
2. Check the presence and quality of peripheral pulses.				

3. Control the presence of peripheral and central cyanosis.				
4. Monitor skin color, temperature, and moisture.				
5. Check oxygen saturation (SPO <sub>2</sub> ) – pulse oximetry.				
6. Monitor heart rate and rhythm.				
7. Monitor respiratory rate and rhythm.				
8. Monitor lung sounds.				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				
✓ <b>MONITOR FOR INDICATIONS OF FLUID OVERLOAD/RETENTION, AS APPROPRIATE</b>				
1. Keep a thorough record of elimination and ingestion.				
2. Perform rigorous fluid balance.				
3. Monitor laboratory results relevant to fluid retention.				
4. Assess indicators of fluid overload/retention (edema, neck vein distention, etc.)				
5. Check the need for diuretic administration.				
6. Check the patient's hydration status.				
7. Advise on fluid intake and food.				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1- Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				
✓ <b>MONITOR PATIENT'S WEIGHT CHANGE BEFORE AND AFTER DIALYSIS, AS APPROPRIATE</b>				
1. Weigh the patient before the hemodialysis session.				
2. Record vital signs: weight, pulse, temperature, pulse, breathing, and blood pressure.				
3. Observe signs of cramps, hypotension, fatigue, headache, and presence of edema.				
4. Weigh the patient after the hemodialysis session.				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				
✓ <b>ASSESS THE LOCATION AND EXTENT OF EDEMA, IF PRESENT</b>				
1. Record the location of the edema, if present in the upper limbs, lower limbs and/or face.				
2. Assess the location of the edema through physical examination and classify its severity into 1+, 2+, 3+, or 4+.				
3. Monitor for signs of pulmonary congestion.				
<ul style="list-style-type: none"> <li>• Perform pulmonary auscultation.</li> <li>• Assess the respiratory rate.</li> </ul>				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				

✓ <b>MONITOR FOODS/FLUIDS INGESTED AND CALCULATE DAILY CALORIC INTAKE, AS APPROPRIATE</b>				
1. Guide the patient about self-care to control fluid intake.				
2. Check if the patient has been seen by a Nutritionist.				
3. Reinforce the need to maintain a low-protein diet with low potassium and reduced sodium.				
4. Evaluate results of laboratory tests: albumin, transferrin, total lymphocyte count, pre-albumin, urea, creatinine, cholesterol, bicarbonate.				
5. Examine the results of laboratory tests in conjunction with observation of food intake and nutritional status.				
6. Offer forms that guide food and liquid intake and inform the amount of water in various foods such as fruits, vegetables, and cereals.				
7. Carry out health education activities on nutrition during the hemodialysis session.				
8. Check if the patient is taking prescribed medications as chelators properly.				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				
✓ <b>INSTRUCT PATIENT ON NOTHING BY MOUTH STATUS, AS APPROPRIATE</b>				
1. Check if the patient maintains adequate fasting before performing routine exams.				
<ul style="list-style-type: none"> <li>• Admission tests: blood count, pre and post-dialysis urea, creatinine clearance, potassium, calcium, phosphorus, TGP, glucose, HBsAg, anti-HIV, anti-HCV, and abdominal ultrasound.</li> <li>• Monthly routine exams: Hematocrit, hemoglobin, urea pre and post dialysis session, potassium, calcium, phosphorus, glutamic pyruvic transaminase (GMT), blood glucose for diabetic patients, and creatinine during the first year.</li> <li>• Quarterly exams: Complete blood count, measurement of transferrin saturation, measurement of ferritin, serum iron, total and fractional proteins, and alkaline phosphatase.</li> <li>• Semi-annual exams: parathyroid Hormone, anti-HBs, and, for susceptible patients (with total anti-HBC or IgG, HBsAg, and anti-HCV initially negative), performing HBsAg and anti-HCV. Creatinine dosage must be measured after the first year.</li> <li>• Annual exams: Total and fractional cholesterol, triglycerides, dosage of HIV antibodies, serum aluminum level, and 2 view chest X-ray.</li> </ul>				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				
✓ <b>DISTRIBUTE THE FLUID INTAKE OVER 24 HOURS, AS APPROPRIATE</b>				
1. Check how the patient consumes fluids daily and redistribute them during the 24 hours, as prescribed by a physician or nutritionist.				
2. Clarify doubts about water intake and about eating foods high in water.				
3. Advise the patient to restrict foods with excess salt and sugar. They will increase the sensation of thirst.				
<b>Evaluation by Experts</b>				
<b>Criteria:</b> 0- Not Adequate 1-Adequate	<b>Content</b> ( ) 0 ( ) 1	<b>Form</b> ( ) 0 ( ) 1	<b>Clarity</b> ( ) 0 ( ) 1	<b>Objectivity</b> ( ) 0 ( ) 1
<b>Justification, suggestions, or other considerations.</b>				
✓ <b>ENCOURAGE SIGNIFICANT OTHER TO ASSIST PATIENT WITH FEEDINGS, AS APPROPRIATE</b>				



1. Promote continuing nutritional education for family members or caregivers close to the patient, especially when the patient does not have the autonomy to carry out daily living activities.
2. Advise on restricting foods with excess salt or sugar so as not to increase thirst.
3. Explain to the family member and/or caregiver the reason for the dietary restrictions that the patient must follow.
4. Try to listen to the family and patient and remove possible doubts about food. Understand which difficulties prevent the patient from having a diet close to ideal.
5. Develop educational material about diet for hemodialysis patients and make educational materials available to family members.

**Evaluation by Experts**

<b>Criteria:</b>	<b>Content</b>	<b>Form</b>	<b>Clarity</b>	<b>Objectivity</b>
0- Not Adequate 1-Adequate	() 0 () 1	() 0 () 1	() 0 () 1	() 0 () 1

**Justification, suggestions, or other considerations.**

✓ **CONSULT PHYSICIAN IF SIGNS AND SYMPTOMS OF FLUID VOLUME EXCESS PERSIST OR WORSEN**

1. Alert the medical team about laboratory test changes and persistence of symptoms related to fluid accumulation or weight inadequacy, even after hemodialysis.

**Evaluation by Experts**

<b>Criteria:</b>	<b>Content</b>	<b>Form</b>	<b>Clarity</b>	<b>Objectivity</b>
0- Not Adequate 1-Adequate	() 0 () 1	() 0 () 1	() 0 () 1	() 0 () 1

**Justification, suggestions, or other considerations.**