

# Descriptions of Indicators on BCR Acuity Tool (v2.0)

## HEMODYNAMICS

LEVEL	DESCRIPTION
<b>Hypotension</b>	
None	No hypotension noted during treatment.
Basic	Blood pressure managed with any or all of the following: sodium profiling, fluid profiling, and dialysate temperature.
Moderate	Patient has hypotensive symptoms that require use of routine interventions. Patient able to complete treatment.
Advanced	Difficulty completing treatment due to hypotension. Requires medical review.
Complex	Unable to complete treatment due to hypotension. Requires urgent medical review.
Very complex	Patient requires continuous monitoring at a critical care level.
<b>Hypertension</b>	
None	No hypertension noted during treatment.
Basic	Blood pressure managed with any or all of the following: sodium profiling, fluid profiling, and dialysate temperature.
Moderate	Patient has hypertensive symptoms that require use of routine interventions. Patient able to complete treatment.
Advanced	Difficulty completing treatment due to hypertension. Requires medical review.
Complex	Unable to complete treatment due to hypertension. Requires urgent medical review.
Very complex	Patient requires continuous monitoring at a critical care level.
<b>Cardiac Status*</b>	
None	No cardiac history.
Basic	Has cardiac history but asymptomatic during dialysis treatment and managed with uncomplicated, medically-prescribed treatments (e.g. nitroglycerin patch, warfarin, home oxygen, pacemaker, HD prescription limits).
Moderate	Symptomatic during dialysis but responded to PRN nitroglycerin, oxygen therapy, and/or fluid therapy. Physician is aware.
Advanced	Difficulty completing HD treatment due to cardiac related symptoms. Responds to nitroglycerin, oxygen therapy, and/or fluid therapy.
Complex	<p>One of the following is present during dialysis treatment:</p> <ul style="list-style-type: none"> <li>Unable to complete run due to cardiac related symptoms. Requires frequent monitoring of vital signs.</li> <li>New onset of a cardiac condition such as chest pain or arrhythmia during treatment: requires urgent medical workup and review.</li> <li>Acute decompensated heart failure (e.g. secondary to infection, failure to take medications as ordered, fluid overload during treatment. Signs and symptoms may include symptomatic hypotension, and pulmonary edema.</li> <li>Pericarditis: requires urgent medical workup and review.</li> <li>Pericardial effusion: requires urgent medical workup and review.</li> <li>Ventricular assist device (VAD)</li> </ul>
Very complex	Unable to dialyze without continuous monitoring at a critical care level.
<b>Fluid Management</b>	
None	Attains goal weight.
Basic	Minor goal weight adjustments by nursing during treatment, UF/sodium profiling.
Moderate	Goal weight adjustment made by nephrologist during treatment, concentrated attention to fluid management, dietary counseling to address fluid issues.
Advanced	Require extended run or rehydration during treatment.
Complex	Difficulty achieving goal weight during treatment. Requires frequent monitoring, regular interventions such as extended treatment, ultrafiltration, sequential dialysis, rehydration.
Very complex	Is being monitored at a critical care level.

## INDEPENDENT FUNCTION

LEVEL	DESCRIPTION
None	Does not require any assistance.
Basic	Mobilizes use walking aide or prosthesis without assistance. Good manual dexterity, strength, vision and hearing.
Moderate	Standby assistance to weight bear, transfer or reposition. Has decreased manual dexterity and/or strength. Communication challenges requiring unique interventions.
Advanced	One person assist to transfer or reposition. Significantly reduced manual dexterity or strength.
Complex	Two or more persons or mechanical lift to transfer or reposition.
Very complex	Patient requiring full care due to complete dependency.

## ACCESS

LEVEL	DESCRIPTION
<b>Current Access Type Used in Dialysis</b>	
None	AVF: Arteriovenous fistula as primary access.
Basic	AVG: Arteriovenous graft as primary access.
Moderate	TCC: Tunneled-Cuffed Catheter as primary access, intended for long-term use.
Advanced	Temporary Hemodialysis Catheter intended for short-term use.
Complex	Dual Access: Two types of accesses, where only one is in use and one is being assessed.
Very complex	Dual Access: Two types of access used simultaneously. TCC or Temporary Hemodialysis catheter and AVF or AVG.
<b>Access Complications</b>	
None	No complications or self cannulates.
Basic	Minor interventions required, e.g. repositioning.
Moderate	One of the following challenges during treatment: difficulty needling, access related pain, vessel spasm, poor flow, reversal of lines, TPA administration, redness at the access site, saline flushes.
Advanced	Concluded treatment but with difficulty due to needling, access related pain, positional, vessel spasm, poor flow, intradialytic vigorous flushing of catheter lumens with saline, reversal of lines, TPA administration, redness at the access site, increasing venous pressures, prolonged bleeding intra and/or post at access site.
Complex	Treatment initiated but unable to complete due to vascular access complications.
Very complex	Unable to dialyze due to non-functioning access.
<b>Percent Reduction Urea</b>	
None	70% and greater
Basic	65 - 69%
Moderate	60 - 64%
Advanced	55 - 59%
Complex	50 - 54%
Very complex	<50% or patient dialyzing off-unit

## TREATMENT

LEVEL	DESCRIPTION
<b>Medications</b>	
None or ESA only	None or Erythropoiesis Stimulating Agent (ESA) Only
Basic	Either or both of (may be self-administered): (1) Patient requires oral medications for comfort on treatment (2) Patient requires iron and ESA therapy to maintain Hgb
Moderate	Patient requires IV antibiotics or IV medications for comfort on the treatment. Requires narcotics for pain control.
Advanced	Any of: (1) Patient requires IDPN (intradialytic parenteral nutrition) (2) Patient requires blood products (3) Patient requires in-patient prescribed infusions not related to dialysis.
Complex	New condition/onset of an event requiring specialized medications without critical care intervention.
Very complex	Medications requiring monitoring at a critical care level.
<b>Respiratory Therapy</b>	
None	No respiratory support necessary.
Basic	Minor or self-administered therapy e.g. home oxygen, nebulizers and respiratory inhalers.
Moderate	Requires oxygen supplementation, nebulizer support during treatment. Requires setting up oxygen supplies during treatments.
Advanced	Use of oxygen or nebulizer therapy that also indicates a need for a medical review or respiratory investigation during treatment.  Acute Respiratory Distress: episodes of acute respiratory distress that resolves with nursing intervention using the site-specific hypoxemia protocols.
Complex	Sudden onset of acute shortness of breath unresolved with intervention. Suctioning or airway management.
Very complex	Critical care level airway support.
<b>Specialized Treatments</b>	
None	None
Basic	Stable patient but unable to self-administer treatment; uncomplicated nursing procedure, e.g. uncomplicated suture or staple removal; more frequent bloodwork :Hgb, INR, K+
Moderate	Stable patient but unable to self-administer treatment; requires more involved nursing procedure, e.g. insertion and maintenance of peripheral IV, maintenance of urinary catheter, flushing of PD tube, complicated suture/staple removal, ostomy care.
Advanced	Patient unstable/potentially unstable requiring treatments that need continuous monitoring e.g. NG tube feed, continuous NG to suction, management of a supra-pubic catheter, continuous bladder irrigation.
Complex	Patient unstable or immediately post-op from major surgery requiring, for example, plasma therapeutic exchange only or combination with hemodialysis, chest tube management, epidural, CVP, PCA pump.
Very complex	Patient requiring critical care setting.

## NURSING INTERVENTIONS

LEVEL	DESCRIPTION	
<b>Patient Monitoring</b>		
None	Q Hourly Patient's condition stable requiring minimal vital signs and monitoring as per unit policy. May be self-monitored.	
Basic	Q 30 minutes	
Moderate	Q 20 minutes	
Advanced	Q 15 minutes	
Complex	Q5 - 15 minutes	
Very complex	Requires continuous monitoring at a critical care level	
<b>Infection Control</b>		
None	Patient self-care dialysis.	
Basic	Routine precautions (i.e., PPEs worn when direct care is being provided, based on risk assessment).	
Moderate	Contact precautions (i.e., PPE's worn on each contact with patient or environment).	
Advanced	Contact and droplet precautions, isolation requirements.	
Complex	Airborne precautions.	
Very complex	All of the above and/or requiring negative pressure room or critical care level.	
<b>Individualized Needs</b>		
None	None	
Basic	Lab studies review Comfort measures Blood glucose monitoring	
Moderate	Hematocrit monitoring Medication review Diabetic teaching	O2 saturation monitoring Incontinence care Dietary support
Advanced	Psychosocial/emotional support Foot assessment Access flow measurement	Booking medical appointments Reviewing in-patient chart and coordinating MARS Changing machine set up
Complex	Organizing travel arrangements Medication reconciliation Coordination of diagnostic studies (drawing bloodwork, ECG, x-ray, ultra-sounds)	
Very complex	Wound assessment and care	

## PSYCHOSOCIAL EMOTIONAL FACTORS

LEVEL	DESCRIPTION
None	During treatment presents as emotionally well-adjusted. Accepting of disease process and treatment options. Independently managing care and treatment.
Basic	During treatment presents as emotionally well-adjusted. Accepting of disease process and treatment options. Managing disease process and treatment with assistance. May have mild anxiety or short-term depressive episodes that are self-managed.
Moderate	During treatment presents as anxious, depressed, non-compliant or aggressive behaviour interfering with ability to manage disease process and treatment. Requires professional intervention to manage.
Advanced	During treatment presents as having high level of anxiety, depression, non-compliance or aggressive behaviour placing limitations on ability to cope with disease and follow treatment requirements.
Complex	During treatment presents as confused, dementia, substance abuse, serious psychosis, harmful to self or others. Severely limited ability to understand disease process and treatment.
Very complex	Severe dementia/psychosis. Unable to understand disease process and treatment. Unable to dialyze without medical and/or physical restraint.