

Supplemental Materials

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Supplemental Table 1: Round 1 Survey Questions and Statements

Question or Statement	Response Options
Where is the primary location that you prescribe CKRT?	Asia Canada Caribbean Central America Europe Mexico Oceania South America United States
What is your primary profession?	Physician Physician Assistant Nurse Practitioner
What is your primary specialty?	Critical Care Medicine Nephrology Cardiology Neonatology
What is your secondary specialty?	Critical Care Medicine Nephrology Cardiology Neonatology Not applicable
How many years have you worked in your current profession (excluding trainee time)?	0-5 6-10 11-15 16-20 >20
At your institution CKRT orders are placed by:	Critical Care Medicine Nephrology Cardiology Neonatology A combination of the above specialties
I start patients on CKRT after they reach a positive fluid balance $\geq 10\%$ in the absence of any other indications.	Always Sometimes Never
I start patients on CKRT after they reach a positive fluid balance $\geq 15\%$ in the absence of any other indications.	Always Sometimes Never
I start patients on CKRT after they reach a positive fluid balance $\geq 20\%$ in the absence of any other indications.	Always Sometimes Never
I start CKRT in a patient with a serum creatinine 2-2.9 times baseline or greater in the absence of any other indications.	Always Sometimes Never

I start CKRT in a patient with urine output < 0.5 ml/kg/hour for \geq 12 hours in the absence of any other indications.	Always Sometimes Never
I start CKRT in a patient with a serum creatinine that is 3 times baseline or greater in the absence of any other indications.	Always Sometimes Never
I start CKRT in a patient with a decrease in eGFR to <35 ml/min per 1.73 m ² in the absence of any other indications.	Always Sometimes Never
I start CKRT in a patient with a urine output < 0.3 ml/kg/hour for \geq 24 hours in the absence of any other indications.	Always Sometimes Never
I prescribe dialytic dose using body surface area.	Always Sometimes Never
I prescribe dialytic dose using weight.	Always Sometimes Never
I use the admission weight of the patient when dosing based on weight or body surface area.	Always Sometimes Never
I use the ideal body weight of the patient when dosing based on weight or body surface area.	Always Sometimes Never
I use the current weight of the patient when dosing based on weight or body surface area.	Always Sometimes Never
If I index dialytic dose to body surface area, I aim for a clearance of 2 L/hour/1.73 m ² .	Always Sometimes Never
If I index patient dialytic dose to weight, I aim for a clearance of 20-30 ml/kg/hour.	Always Sometimes Never
I use continuous venovenous hemofiltration (CVVH) as a mode of CKRT.	Always Sometimes Never
I use continuous venovenous hemodialysis (CVVHD) as a mode of CKRT.	Always Sometimes Never
I use continuous venovenous hemodiafiltration (CVVHDF) as a mode of CKRT.	Always Sometimes Never
I use slow continuous ultrafiltration (SCUF) as a mode of CKRT.	Always Sometimes Never

I use CKRT rather than intermittent hemodialysis for hyperammonemia.	Always Sometimes Never
I use customizable CKRT solutions.	Always Sometimes Never
I change the hemofilter after 72 hours of therapy.	Always Sometimes Never
I prescribe CKRT for patients ≤ 10 kg.	Always Sometimes Never
I prescribe a blood prime when an extracorporeal circuit exceeds 10% of a patient's circulating blood volume.	Always Sometimes Never
I use citrate as a regional anticoagulant for CKRT.	Always Sometimes Never
I use systemic heparin as an anticoagulant for CKRT.	Always Sometimes Never
I use prostacyclin as an anticoagulant for CKRT.	Always Sometimes Never
I use citrate as a regional anticoagulant in patients with liver failure.	Always Sometimes Never
I begin removing fluid in the first hour of CKRT.	Always Sometimes Never
I base my maximum fluid removal goal on the patient's total blood volume.	Always Sometimes Never
I assess fluid removal goals at least every 24 hours.	Always Sometimes Never
I assess fluid removal goals at least every 12 hours.	Always Sometimes Never
I assess fluid removal goals at least every 6 hours.	Always Sometimes Never
I assess fluid removal goals at least every 4 hours.	Always Sometimes Never

At my center goals for fluid removal are determined primarily by the critical care medicine team.	Always Sometimes Never
At my center goals for fluid removal are determined primary by the nephrology team.	Always Sometimes Never
At my center goals for fluid removal are determined by the critical care and nephrology teams together.	Always Sometimes Never
I monitor filtration fraction.	Always Sometimes Never
My primary consideration when deciding to initiate net ultrafiltration is hemodynamic status.	Always Sometimes Never
My primary consideration when deciding to initiate net ultrafiltration is fluid balance.	Always Sometimes Never
I achieve my goal net ultrafiltration rate by varying ultrafiltration rate only.	Always Sometimes Never
I achieve my goal net ultrafiltration rate by varying replacement fluid rate only.	Always Sometimes Never
I achieve my goal net ultrafiltration rate by varying both the ultrafiltration rate and the replacement fluid rate.	Always Sometimes Never
What is your starting CKRT dose?	Free Text
Do you modify the dose? If so, for what indication?	Free Text
Do you monitor dose delivered?	Free Text
If you dose CKRT based on body surface area, how do you typically dose?	Free Text
If you dose CKRT in ml/kg/hr, how do you typically dose?	Free Text
What solution is used for replacement fluid at your center?	Free Text
What solution is used for dialysate fluid at your center?	Free Text
What is the most common anticoagulant used for CKRT at your center and why?	Free Text
If you monitor filtration fraction, what value do you target?	Free Text

When prescribing CVVH, do you routinely administer replacement fluid pre-dilution or post-dilution?	Free Text
What coagulation parameters do you follow for heparin anticoagulation while on CKRT and what are your typical targets?	Free Text
What is machine brand do you currently use to dialyze patients \leq 10 kg?	Free Text
What is your most common intervention for when hemodynamic instability occurs during net ultrafiltration?	Free Text
Do you have a maximum net ultrafiltration rate in ml/kg/hr?	Free Text

CKRT Continuous Kidney Replacement Therapy

Supplemental Table 2: Round 2 Survey Questions and Statements

Question or Statement	Response Options
Where is the primary location that you prescribe CKRT?	Asia Canada Caribbean Central America Europe Mexico Oceania South America United States
What is your primary profession?	Physician Physician Assistant Nurse Practitioner
What is your primary specialty?	Critical Care Medicine Nephrology Cardiology Neonatology
What is your secondary specialty?	Critical Care Medicine Nephrology Cardiology Neonatology Not applicable
How many years have you worked in your current profession (excluding trainee time)?	0-5 6-10 11-15 16-20 >20
At your institution CKRT orders are placed by:	Critical Care Medicine Nephrology

	Cardiology Neonatology A combination of the above specialties
I start patients on CKRT after they reach a positive fluid balance $\geq 10\%$ in the absence of any other indications.	Always Sometimes Never
I start patients on CKRT after they reach a positive fluid balance $\geq 15\%$ in the absence of any other indications.	Always Sometimes Never
I start patients on CKRT after they reach a positive fluid balance $\geq 20\%$ in the absence of any other indications.	Always Sometimes Never
I start CKRT in a patient with a urine output < 0.3 ml/kg/hour for ≥ 24 hours in the absence of any other indications.	Always Sometimes Never
I prescribe dialytic dose using body surface area.	Always Sometimes Never
I use the admission weight of the patient when dosing based on weight or body surface area.	Always Sometimes Never
I use the ideal body weight of the patient when dosing based on weight or body surface area.	Always Sometimes Never
If I index dialytic dose to body surface area, I aim for a clearance of 2 L/hour/1.73 m ² .	Always Sometimes Never
If I index patient dialytic dose to weight, I aim for a clearance of 20-45 ml/kg/hour.	Always Sometimes Never
I modify my standard starting CKRT dialytic dose if I am treating a patient with hyperammonemia.	Always Sometimes Never
I modify my standard starting CKRT dialytic dose if I am treating a patient for drug intoxication.	Always Sometimes Never
I modify my standard starting CKRT dialytic dose if I am treating a patient with citrate accumulation.	Always Sometimes Never
I measure delivered CKRT dose based on blood and effluent concentrations of urea nitrogen.	Always Sometimes Never
I use continuous venovenous hemodiafiltration (CVVHDF) as a mode of CKRT.	Always Sometimes Never

I use CKRT rather than intermittent hemodialysis for hyperammonemia.	Always Sometimes Never
I change the hemofilter after 72 hours of therapy.	Always Sometimes Never
I prescribe CKRT for patients ≤ 10 kg.	Always Sometimes Never
I prescribe a blood prime when an extracorporeal circuit exceeds 10% of a patient's circulating blood volume.	Always Sometimes Never
I use citrate as a regional anticoagulant for CKRT.	Always Sometimes Never
I use heparin as an anticoagulant for CKRT.	Always Sometimes Never
I use citrate as a regional anticoagulant in patients with liver failure.	Always Sometimes Never
When I use heparin for anticoagulation on CKRT I follow ACT values.	Always Sometimes Never
When I use heparin for anticoagulation on CKRT I follow PTT values.	Always Sometimes Never
When I use heparin for anticoagulation on CKRT I follow Anti-Xa values.	Always Sometimes Never
I begin removing fluid in the first hour of CKRT.	Always Sometimes Never
I assess fluid removal goals at least every 24 hours.	Always Sometimes Never
I assess fluid removal goals at least every 12 hours.	Always Sometimes Never
I assess fluid removal goals at least every 6 hours.	Always Sometimes Never
At my center goals for fluid removal are determined primarily by the critical care medicine team.	Always Sometimes Never

At my center goals for fluid removal are determined by the critical care and nephrology teams together.	Always Sometimes Never
I monitor filtration fraction.	Always Sometimes Never
My primary consideration when deciding to initiate net ultrafiltration is hemodynamic status.	Always Sometimes Never
My primary consideration when deciding to initiate net ultrafiltration is fluid balance.	Always Sometimes Never
I achieve my goal net ultrafiltration rate by varying ultrafiltration rate only.	Always Sometimes Never
When calculating net ultrafiltration rate, I account for enteral intake.	Always Sometimes Never
When hemodynamic instability occurs on CKRT my first intervention or recommended intervention is to reduce the ultrafiltration rate.	Always Sometimes Never
When hemodynamic instability occurs on CKRT my first intervention or recommended intervention is to start a vasoactive agent.	Always Sometimes Never
When hemodynamic instability occurs on CKRT my first intervention or recommended intervention is to provide a bolus of fluid.	Always Sometimes Never
The machine that I use for CKRT in patients ≤ 10 kg is The Cardio-Renal Pediatric Dialysis Emergency Machine (CARPEDIEM).	Always Sometimes Never
The machine that I use for CKRT in patients ≤ 10 kg is The Prismaflex System.	Always Sometimes Never
The machine that I use for CKRT in patients ≤ 10 kg is The Aquadex SmartFlow System.	Always Sometimes Never
How do you monitor dose delivered during CKRT?	Free Text
What do you consider to be an unsafe amount of hourly ultrafiltration?	Free Text
Do you have a quality monitoring program for CKRT at your institution?	Free Text

Supplemental Table 3: Solutions Used for Replacement Fluid

Solution	N (%) of 147 Responses
Primasol	33 (22.4)
Primasate	11 (7.5)
Phoxillum	30 (20.4)
Hemosol	1 (0.7)
Aquasol	1 (0.7)
Duosol	5 (3.4)
Normal Saline	2 (1.4)
Dianeal	1 (0.7)
Byphozyl	1 (0.7)
Prismocal	2 (1.4)
Regiocit	2 (1.4)
NxtStage RFP	2 (1.4)
Not Applicable	56 (38.1)

Supplemental Table 4: Solutions Used for Dialysate Fluid

Solution	N (%) out of 147 Responses
Primasol	33 (22.4)
Primasate	21 (14.3)
Phoxillum	22 (15.0)
Hemosol	3 (2.0)
Aquasol	1 (0.7)
Duosol	5 (3.4)
Dianeal	1 (0.7)
Byphozyl	3 (2.0)
Prismocal	3 (2.0)
NxtStage RFP	3 (2.0)
Not Applicable	52 (35.4)