

Vanderbilt University Medical Center

Multidisciplinary Surgical Critical Care Service

Use of Continuous Renal Replacement Therapy and Team Communication

GOAL:

To continuously improve the care of patients undergoing continuous renal replacement (CRRT) in the SICU and maintain a high level of communication between the SICU Team and the Nephrology Team.

INITIATIVE SUMMARY AND RATIONALE:

In patients with renal failure, fluid management is a collaborative effort with the SICU team and the nephrology service. However, serious complications may be associated with team providers changing CRRT orders without communication with the nephrology staff.

To limit communication and ordering errors, the SICU has established the following policy:

- No changes are to be made in any aspect of CRRT, including the ultrafiltration rate, without the nephrology fellow being notified.
- A range for an ultrafiltration rate can be ordered when clinically appropriate and mutually agreed upon following discussions between the SICU and nephrology teams.

For example: Ultrafiltration rate of negative 25ml/hr to negative 50ml/hr, as tolerated by BP, pressor requirement, or some other clinical parameter determined at the Fellow physician level. Contact the nephrology team when renal replacement outside of this ultrafiltration rate is needed, significant changes with acid/base or electrolytes occur, or the patient's clinical status is altered.

This policy allows the nephrology fellow to make sure the order is appropriate for the patient, the SICU Fellow understands what he/she wants, and that the bedside RN and dialysis RN understand the order. If the patients are rounded on more than once a day and well discussed with both teams, unanticipated changes should be infrequent.

ACTION PLAN:

1. When significant organ failure includes the renal system (evidence of Acute Kidney Injury, Anuria, Interstitial Injury, continued elevation of serum creatinine, etc.), the SICU team will consult the nephrology service.
2. At least 1 time per day, verbal discussions will occur between the nephrology team and the SICU fellow or faculty. This should be at the fellow/faculty level. If CRRT is needed, nephrology will prescribe the dialysis and an ultrafiltration rate will be determined. If applicable, a range will be established. Any deviations as described above, the SICU team will notify the nephrology team. **THE NEPHROLOGY TEAM WILL BE RESPONSIBLE FOR ALL DIALYSIS ORDERS PER HOSPITAL POLICY.**
3. Open collaboration between services and ongoing resident education will be expected to occur in order to optimize care for this complex patient population.

This policy is specific to the SICU for communication purposes. This policy is in no way to circumvent the standing CRRT policy #30-17.09 as outlined here:

<https://mcapps.mc.vanderbilt.edu/E-Manual/Hpolicy.nsf/AllDocs/D2728AE042BFC48786256928007AF356>

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