

Background - Aim

Results

Discussion

Advancements and improvements in care for critically ill pediatric population has led to fast changes in pediatric acute kidney injury AKI epidemiology. Prevalent causes leading to pediatric AKI are actually from single center's data. There is also a lack of information concerning AKI patients who did not require CRRT

After usability test, the registry has been designed on an open source based framework. Automated data verification system, pRIFLE calculation and alert, fluid management graph result as valid supports for fast data analysis helping in daily clinical activities.

The main topics in which the PAKI registry could give a contribution are:

The aim of the study is to: describe pediatric AKI patients, identify risk factor for AKI progression, evaluate the influence of fluid overload and type of fluids administered (colloids, vs crystalloids vs nutrition) on clinical outcomes in AKI (w and w/o RRT) patients, describe current practices of RRT.

- Describe pediatric AKI patients
- Identify risk factors for AKI progression
- Identify targets for AKI prevention,
- Evaluate the influence of fluid overload on clinical outcomes in ICU patients
- Evaluate the influence of fluid overload on clinical outcomes in ICU patients with AKI
- Explore the influence of type of administered fluids (crystalloids vs colloids vs nutrition) on clinical outcomes in ICU patients.
- Describe current practice of RRT in the ICU
- Compare RRT dose and RRT-related complications in the different modalities

Conclusions

The PAKI registry could represent a step forward in the description of the AKI epidemiology in pediatric patients and contribute to the resolution of the controversies regarding CRRT like initiation, dose, technique, anticoagulation.

References

The Prospective Pediatric Continuous Renal Replacement Therapy (ppCRRT) Registry: a critical appraisal. *Pediatr Nephrol.* 2013 Aug 28. Sutherland SM, Goldstein SL, Alexander SR.

Material and Methods

We developed a web-based password protected registry, dedicated to pediatric patients to support an observational and prospective international multicenter study in pediatric intensive care units pICU. Inclusion criteria: all patients admitted to pICU for almost 48h. We daily collect the amount of fluids (intake and output), diuretics, drugs, vasopressors and inotropes as well as scores and type of ventilation. Sepsis has also a dedicated section. RRT page includes dose calculation, circuit type and life, anticoagulants, type and location of catheter. Treatments done with the new carpediem machine also find their location in this section.

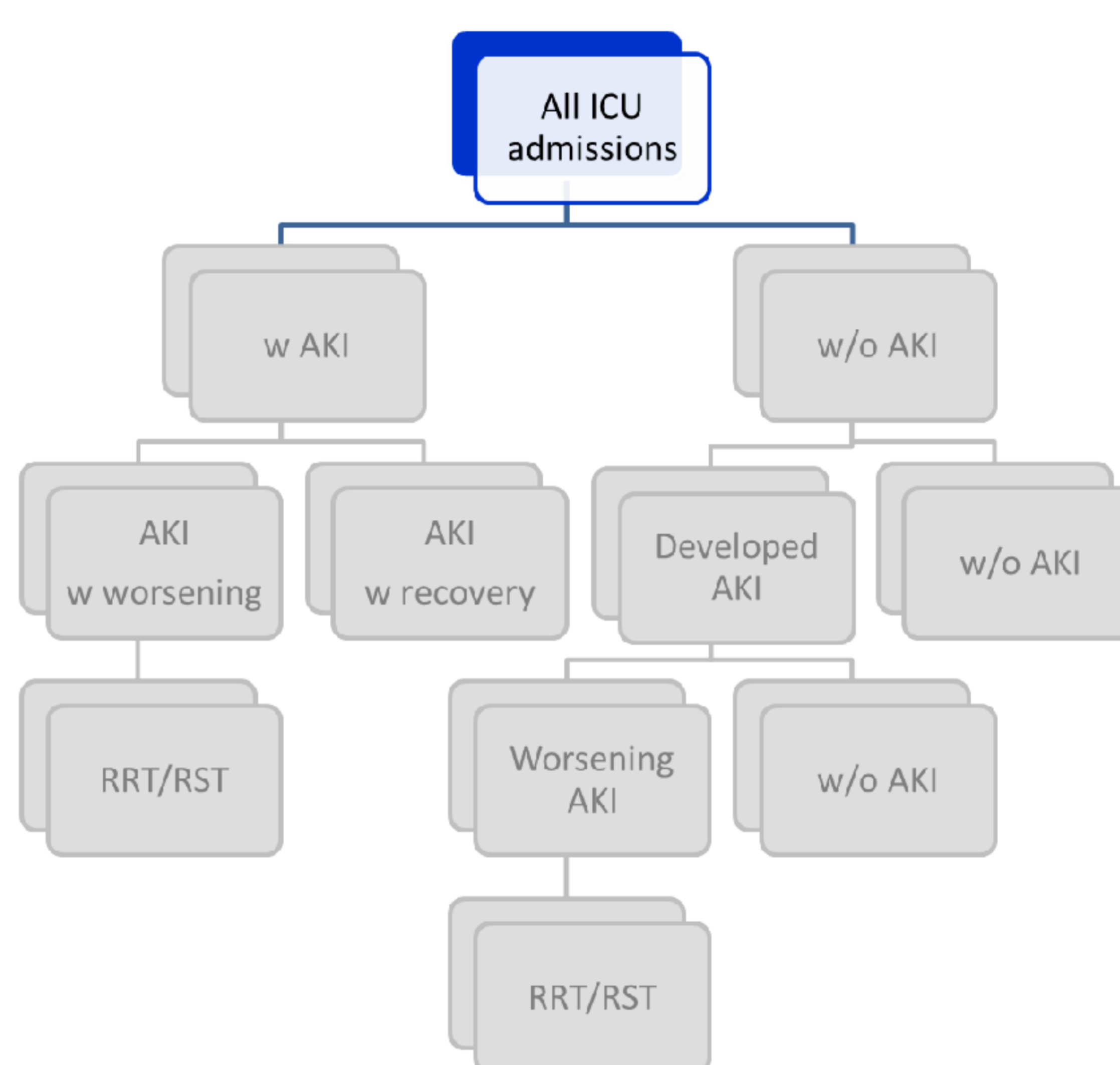


Figure 2. The Study Design

Figure 1. The Scores calculation .

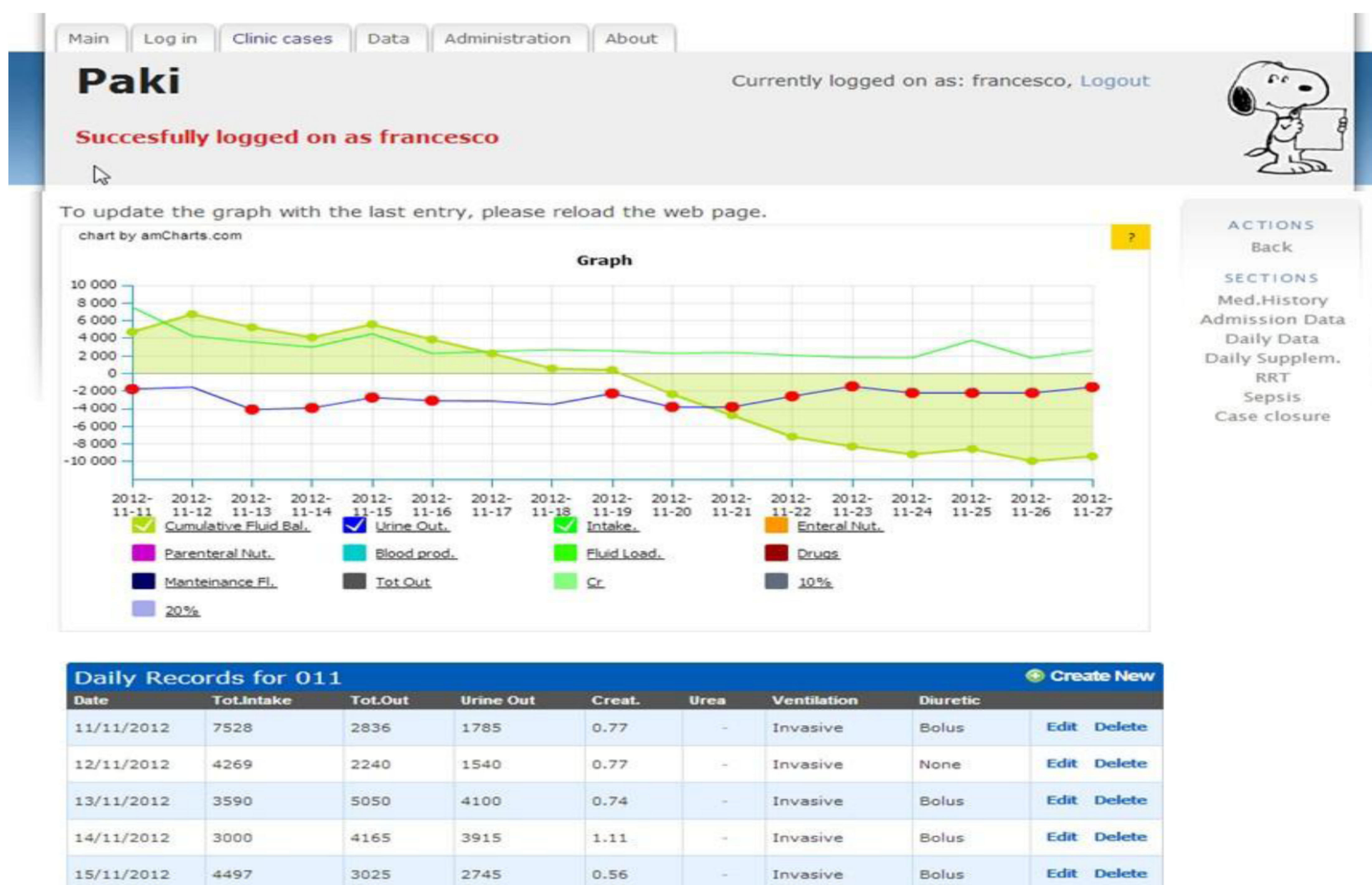


Figure 3. The CRRT section