I Need to Stay on HD for How Long? What Do You Mean UF Rate 13?

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**Topic:** Ultrafiltration rates (UFR) >13 ml/kg/hr have been associated with increased cardiovascular mortality in hemodialysis (HD) patients. The 2020 End Stage Renal Disease Quality Incentive Program will require HD facilities to report UFR for each qualifying patient. Pediatric institutions will initially be exempt from this regulation. However, we felt it was important to follow the new guidelines to improve the cardiovascular health of our pediatric patients. Approach: In 2016, opportunities for improvement were identified by reviewing our patients’ average UFR & total % fluid loss per treatment (tx). Nurses & physicians partnered to educate all staff & patients/families on the importance of maintaining UFR < 13ml/kg/hr & <5% fluid loss per tx. To more easily calculate the correct UFR & fluid loss percentages, we partnered with our electronic health record team to revise the HD flowsheet. The revisions included calculations pre-tx for predicted length of HD time needed to maintain <13 ml/kg/hr & the predicted fluid volume % based off the net goal & patient weights. In addition, the flowsheets could now automatically calculate the total ml/kg/hr completed & the total % fluid loss post tx.

**Topic Information:** Complying with these low UFR has been challenging in the pediatric population because adherence to this results in increased treatment times & additional treatments. To overcome these challenges our unit has strived to make treatments as positive as possible for the patients/ families by: increasing activities with child life, & optimizing music, & art therapy. After benchmarking & team discussion, we have trialed allowing some patients to eat while on HD to help ease the burden of increased HD times.

**Implications:** The flowsheet changes have made calculating the desired UFR & fluid loss goals easier for providers and safer for patients. Education around the health benefits of the new practice for fluid removal, coupled with greater use of distraction techniques provided to our patients, has allowed greater acceptance of this significant change to patient/families & staff. HD patients who had biannual echocardiograms since the start of this project showed improvement in left ventricular mass index.

*Abstract selected for presentation at ANNA National Symposium, Las Vegas, 2018*