Introduction:
The evidence base for management of fluid removal during renal replacement therapy (RRT) is limited. A recent international survey revealed the extent of practice variation worldwide [1]. Our aim was to summarise the responses from Europe-based healthcare professionals who participated in the survey.

Methods:
The international self-administered, cross-sectional, internet-assisted, open survey was disseminated between January 2018 and January 2019 via website links and emails to members of different critical care societies.

Results:
485 participants from 31 European countries completed the survey of whom 365 (75%) were intensivists and 306 (63%) worked in university-based hospitals. Persistent oliguria / anuria was the most common indication for fluid removal (51% responders). The parameters which guided fluid removal included hemodynamic status (47% responders), cumulative fluid balance since admission (23% responders), and 24-hour fluid balance (17% responders). 90% of participants reported using CRRT with a median net ultrafiltration rate 98 mL/hr (IQR 51–108mL/hr) for hemodynamically unstable and a rate of 300 mL/hr (IQR, 201–352mL/hr) for hemodynamically stable patients. Only 26% of practitioners checked net fluid balance hourly (70% nurses, 16% physicians). New hemodynamic instability, defined as new onset or worsening tachycardia, hypotension, or need to start or increase the dose of vasopressors was reported to occur in 20% patients (IQR 10.0–30.0). Different strategies to re-gain hemodynamic stability were used. (Figure 1) Main barriers to fluid removal were patient intolerance (72% physicians, 85% nurses) and interruptions in fluid removal (43% physicians, 64% nurses). The majority of participants agreed that guidelines and protocols would be beneficial.

Conclusion:
The practice of fluid removal during RRT is very variable across European countries. Nurses and doctors identified a need for evidence-based protocols and clear guidelines.

References:

Image:

Common measures to correct haemodynamic instability during fluid removal