CRRT EFFLUENT MANAGEMENT

Auto-effluent can reduce costs and release nursing capacity

Budget impact assessment across the adult ICUs at the Royal Victoria Hospital and Montreal General Hospital

WHAT WE COMPARED

Three approaches to managing CRRT effluent:

1. **Current manual practice:** ~14 manual 5-L bag changes per patient-day
2. **Universal auto-effluent:** Auto-effluent used for all eligible episodes
3. **Hybrid approach:** Auto-effluent used for a selected share of episodes

PER 5-DAY EPISODE	ANNUAL IMPACT	NURSING CAPACITY
$884	**$271K**	**5.75 h**
total economic savings	total economic savings / year	released per episode
$363 consumable savings	$111K consumable savings / year	~1,765 h potential capacity / year

Based on 307 CRRT episodes annually. *Total economic savings include the modeled value of nursing time; this represents clinical capacity, not necessarily cash-releasing savings.*

WHAT DRIVES THE VALUE

- Lower consumable use creates direct budget savings.
- The larger economic benefit comes from reducing nursing time spent changing effluent bags.
- Released time can be redirected to other patient-care activities.

BOTTOM LINE

Universal auto-effluent is less costly than current manual practice and the illustrative hybrid strategy.

TAU RECOMMENDATION

CONSIDER IMPLEMENTATION

Routine adoption appears economically favourable if MUHC treatment durations are broadly consistent with the five-day base case.

After implementation, monitor CRRT volume, treatment duration and kit utilization to confirm the projected budget impact.