

Item S1.

Details and Background of Community House Hemodialysis

The first community house HD was established in New Zealand in early 2001, in the premises of a nephrology-orientated charitable society, the Kidney Society (www.kidneysociety.co.nz). In response to increased demand from patients to dialyze in a community setting due to often social barriers to dialyzing at home, the Kidney Society purchased a residential property in 2004 within 1 km of the main tertiary referral hospital in the region. A formal partnership between the Kidney Society and Counties Manukau District Health Board was established (1). Three houses now exist in Auckland and one in Wairoa a town in Hawke's Bay located approximately 1.5 hours from the nearest staffed HD facility.

Each house has been fitted with hemodialysis machines by the local District Health Board and the number of machines depends on both the rooms and space within the house and the number of patients' utilizing the community houses. Patients are either allocated their own machine or share a machine, organizing their rosters between themselves. Patients are treated as independent home hemodialysis patients. They are trained and signed off for home HD by the District Health Board home dialysis teams and medically supported by the District Health Boards through on-call rosters and routine follow-up in outpatient clinics (1).

The patients are responsible for their dialysis and cleaning their machines, the charitable societies are responsible for the community HD house premises, and the District Health Boards are responsible for the supply of dialysis machines/consumables and clinical oversight of patients.

The machines used for community house HD are the same as those used for home HD in New Zealand. Water is treated through portable reverse-osmosis machinery, the same as with home HD patients and water testing is conducted in the same way. The kidney society is responsible for allocation of the machines to patients and if necessary has a waiting list of patients who would be suitable to dialyze in a community HD house (1).

In NZ patients on home HD (and community house HD) are not required to be accompanied for dialysis sessions unless they require support. Therefore patients in the community HD houses only require a companion if this is required for assistance, otherwise they can dialyze alone. There is an emergency call bell beside each dialysis machine, which are directly linked to local paramedic services with their own access into the houses. In the event of a triggered alarm, paramedics may call the room of the house in question, but otherwise attend as a priority callout, especially if there is no response. There is also phone access for patients within the houses. Patients are also independent in all aspects of their care including medication administration. No remote monitoring is currently in place for patients on HD in NZ.

Reference:

1. Marshall MR, van der Schrieck N, Lilley D, Supershad SK, Ng A, Walker RC, et al. Independent community house hemodialysis as a novel dialysis setting: an observational cohort study. *Am J Kidney Dis*. 2013;61(4):598-607.



