Single unit experience of nurse led monthly quality assurance reviews on a haemodialysis unit

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Introduction
It is standard practice for unit haemodialysis patients in the UK to have their dialysis treatment reviewed, usually on a monthly basis in dialysis quality assurance (QA) meetings. Dialysis parameters reviewed at such meetings include, renal anaemia, bone profile, blood pressure, vascular access and dialysis solute clearance. In many units in the UK, these meetings are traditionally led by a nephrologist, together with a dialysis staff nurse and possibly a dietician and pharmacist. In our unit consisting of 136 patients, we were holding such meetings on a weekly basis, reviewing approximately one quarter of patients at each meeting. We undertook a trial of nurse led monthly QA meetings.

Method
Haemodialysis quality assurance flow charts were developed for management of anaemia, bone profile (calcium, phosphate, parathyroid hormone (PTH), blood pressure, vascular access monitoring and dialysis adequacy by a nephrologist responsible for managing haemodialysis patients. Two senior dialysis sisters, both with non-medical prescriber qualifications attended regular HD QA meetings with the lead nephrologist for several months on the dialysis unit. With close supervision, the dialysis sisters then trialled reviewing dialysis parameters and monthly blood results and making independent decisions on changes to medications and dialysis prescriptions where required, with direct supervision from the nephrologist. When both dialysis staff felt confident in their decision making, we trialled conducting the monthly QA meetings led by the 2 sisters for 2 months, followed by the nephrologist month 3 and again the dialysis sisters months 4 and 5. Any concerns or questions about results and treatment changes that the nurses did not feel confident to make, they discussed with the nephrologist. We compared the dialysis parameters for the 5 months before and 5 months during the time period of the trial.

Results
The dialysis sisters successfully completed 4 months of HD QA meetings. There was no difference noted between haemoglobin, corrected calcium, phosphate, parathyroid hormone, predialysis blood pressure or dialysis adequacy measured by single pool Kt/V in the 5 months before the trial period and 5 months during the trial period (Table 1). Both staff members felt increasingly confident with their decision making with time and enjoyed the opportunity to do so. Concerns with dialysis access seemed to be identified in a more timely manner when the nursing staff were undertaking the QA meetings. During the 4 months whilst the nurses were leading the QA meetings, the unit nephrologists reviewed an increased number of patients compared to the 4 months prior to the trial.

Discussion
This was a successful trial of nurse led monthly QA reviews on our dialysis unit. The nursing staff involved felt their knowledge relating to management of dialysis patients increased during the trial period and they felt more empowered and confident in independent decision making. The HD dialysis parameters were managed as effectively as they had been by the nephrology team. The nurse led QA reviews enabled the nephrologists to spend more time reviewing dialysis patients on the unit.