How do we improve the diabetic care of our in-centre haemodialysis population?

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Introduction: Due to the scheduling of haemodialysis (HD) and the burden of disease, people with diabetes on haemodialysis (HD) often find difficulty in accessing the specialist care required for their management. As a result, they often receive suboptimal care. The Diabetes in Haemodialysis (DiH) national working group has proposed standards to identify areas of suboptimal care and encourage interventions, to improve the care of diabetes for this population.

Method: Eleven national standards of care were audited in a Hospital-based NHS unit, a Satellite NHS unit and a Satellite non-NHS unit. These included: a named healthcare professional being responsible for diabetic care; annual reviews of diabetic control, retinopathy and diet; HbA1c within target ranges; capillary blood glucose (CBG) monitoring and; weekly foot inspections.

The following interventions were implemented in the first cycle after initial data collection:
- Presentation of results to Renal Dietitians & review of referral pathways
- Introduction of a Virtual Diabetes Renal MDT to discuss all patients and manage complex cases
- Education for dialysis nurses designed and delivered by DiH group.
- Referral to primary/secondary care services for diabetic review

Results: Across the three Leicestershire dialysis units, there are a total of 362 people on HD, 148 of which have diabetes (40.9%). Baseline data showed differences in compliance to standards across all three units, attributable to differences in organisational structure (different referral pathways, staffing contracts and proximity to secondary care services) and differences in patient population (socioeconomic status and ethnic diversity). Standards such as annual review by diabetes specialist, dietetic advice and retinopathy screening showed low total compliance of 34.0%, 32.7%, and 75.8% respectively.

The re-audit showed that these standards improved (49.3%, 47.3% and 79.7% respectively); however there was reduction in nursing care standards. Pre- & post-HD CBG monitoring reduced from 98% to 88.3%, and weekly foot inspections from 50% to 42.2%.

Discussion: This quality improvement programme identified areas where standards are underachieved across different units, and the barriers to achieving them. Multi-disciplinary team (MDT) evaluation suggests that patient engagement and education played a large role in achieving good care. Engagement from MDT services including eye screening and dietetic service is also crucial for providing patient-centred care. Staffing pressures and time constraints contributed to low compliance to weekly foot inspections and inconsistent pre- & post-HD CBG monitoring.

In order to improve the standards further and provide care at the “point of dialysis,” the following interventions were identified for implementation and re-evaluation:
- Presentation of results and education for Dialysis Nurses
- Sharing “Diabetes Foot Care Tool” and standardising documentation across all units
- Identifying those at risk of hypoglycaemia with a “Hypoglycaemia Risk Tool”
- Discussion with eye screening services to provide opportunistic screening at HD units
Sharing areas of good practice (100% pre- & post HD CBG monitoring at the Satellite Non-NHS unit; 100% weekly foot inspections at Satellite NHS unit), may help to improve standards of care more widely across units.