

Implementation of a frailty screening programme and a modified Comprehensive Geriatric Assessment service in a Nephrology Centre

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Introduction: Frailty is highly prevalent in patients with chronic kidney disease (CKD) and is associated with adverse health outcomes. The Clinical Frailty Scale (CFS) is a validated frailty screening method in CKD populations and the Comprehensive Geriatric Assessment (CGA) is the gold standard of care for frail older people. The aims of this quality improvement project were to: (1) proactively identify frail patients with CKD using the CFS; and (2) assess and support patients identified as frail using the principles of the CGA.

Methods: A frailty screening programme was implemented in September 2018. The CFS was used in outpatient clinics, haemodialysis units and integrated into the nursing admissions process on the Renal ward. A Renal Frailty Multi-Disciplinary Team (MDT) was established, which included a clinician, dialysis sister, Kidney Choices clinical nurse specialist, dietician, renal psychologist, occupational therapist (OT) and social worker. Renal Frailty MDT referral criteria included: CFS ≥ 5 (or CFS < 5 with concerns about mobility, cognition or nutritional status) and non-dialysis or dialysis-dependent CKD. Referred patients were triaged via telephone by an OT. Eligible patients were offered a home assessment that used the principles of the CGA, termed a modified CGA (mCGA). Patients were discussed at a MDT meeting during which a targeted management plan was created. This plan was then communicated with the wider Renal team. Data were collected between 03/09/2018 and 02/09/2019.

Results: A total of 491 patients (450 outpatients [366 non-dialysis and 84 dialysis patients] and 41 inpatients) were screened using the CFS. One hundred and sixty-two patients (33%) were screened as frail (CFS ≥ 5). Within the 450 outpatients, more frail patients were admitted than non-frail patients (41% vs 21%, $p < 0.001$) and more frail patients died than non-frail patients (15% vs 2%, $p < 0.001$). Furthermore, when adjusted for age, gender and dialysis-dependence, frailty was associated with an admission hazard ratio of 2.48 (95% CI 1.71-3.58) and a mortality hazard ratio of 9.24 (95% CI 3.39-25.20). Twenty-six patients received a mCGA (mean age 74 ± 16 years; 12 [46%] female patients; 15 [58%] dialysis-dependent patients). Figure 1 demonstrates the number of active problems and recommended actions for each patient. The three most commonly identified problems were: falls/falls risk ($n=22$), mobility/function ($n=20$) and mood/anxiety ($n=8$). Eleven patients participated in telephone calls that explored their experience of the service. Most patients reported that they found the mCGA helpful. However, feedback suggested that patients would benefit from more information prior to the visit and a clearer explanation of planned interventions. During the telephone calls, patients felt able to express the concerns that they had when thinking about the future.

Discussion: Patients living with frailty and CKD have a high number of active health problems and an increased risk of hospitalisation and mortality. It is possible to successfully implement a frailty screening programme and mCGA service within Renal Services. In doing so, otherwise unknown patient needs can be identified and a holistic person-centered care plan developed that aims to improve the morbidity, mortality and health-related quality of life of this vulnerable group of patients.