Chronic kidney disease (CKD) general practitioner referrals pre- and post-NICE CKD guidance 2014

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Aims

We assessed management of cardiovascular risk and timeliness of referral in all new general practitioner (GP) referrals to the renal clinic in 2012, and again in 2016, 2 years after the introduction of National Institute for Health and Care Excellence (NICE) chronic kidney disease (CKD) guidance in 2014.

Methods

All new GP referrals to the Dorset Renal Service in 2012 and 2016 were analysed. Data were collected on patient age, CKD stage and estimated glomerular filtration rate (eGFR; at referral), renal imaging pre-referral, blood pressure, smoking, body mass index (BMI), HbA_{1C} (in diabetic patients) and lipid assessment.

All statistical analyses were performed using IBM SPSS Statistics version 23. Comparison of pre- and post-NICE guidance proportions were compared using a chi-squared test, with a p-value of less than 0.05 considered significant.

Results

486 new GP referrals were received in 2012, and 574 in 2016 (18% increase post-NICE CKD guideline). Data completion was 100% for renal imaging pre-referral, blood pressure, BMI, diabetic status at referral, and lipid assessment at referral. Two patients in both cohorts did not have estimated glomerular filtration rate (eGFR) / renal stage assessments due to age (<18 years), and one patient in the 2016 cohort refused blood testing. One diabetic patient in the 2012 cohort did not have HbA_{1c} testing.

Conclusions

GP referral of new patients to the renal clinic increased post-NICE CKD guidance. Fewer stage 4 and 5 CKD patients were referred, but the number of patients with eGFR <20 mL/min/m^2 did not change significantly (late CKD referrals). Blood pressure control improved post-NICE guidance and more patients had their cholesterol levels checked. However, more referred patients were categorised as obese. Smoking cessation and pre-referral renal imaging showed no significant change. ■

Table 1. Change in proportion of parameters pre- and post-NICE guidelines

Change in proportion of:	Pre-NICE (% yes)	Post-NICE (% yes)	Chi squared	p-value
Stage 4 and 5 patients	33.9	23.5	14.024	<0.001
eGFR <20	7.9	6.1	1.206	0.272
Ultrasound pre-referral	47.0	47.5	0.025	0.875
Systolic blood pressure >140 mmHg	65.6	57.3	7.483	0.006
Diastolic blood pressure >90 mmHg	26.3	19.0	8.100	0.004
Cholesterol tested	82.7	88.8	8.178	0.004
High BMI	34.8	40.8	4.102	0.043
Diabetic	27.8	30.7	1.094	0.296
Smoker	11.7	12.6	0.172	0.678

BMI = body mass index; eGFR = estimated glomerular filtration rate; NICE = National Institute for Health and Care Excellence.

Conflict of interest statement

None declared.

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