socio-economic gradient in males. The overall prevalence of CKD stages 1–5 was 14% in males and 13% in females. Only 1.5% of males and 1.3% of females reported being told by a doctor they had CKD.

Discussion These are the first nationally representative, population-based data on the prevalence of CKD in England. CKD is common, strongly age–related and with gender and socio-economic differences. Prevalence estimates will be lower if CKDEPi equation is introduced. Associations of CKD with risk factors such as blood pressure, BMI and diabetes will be reported.

Health Services Research and clinical issues

OP26 **PREVALENCE OF CHRONIC KIDNEY DISEASE IN ENGLAND: FINDINGS FROM THE 2009 HEALTH SURVEY FOR ENGLAND**

P Roderick,[1*] M Roth,[2] J Mindell[2] *[1]Public Health Sciences and Medical Statistics, University of Southampton, Southampton, UK; [2]Public Health and Epidemiology, University College, London, UK*

Background Chronic kidney disease (CKD) is a global public health problem because it is common, independently associated with cardiovascular risk and may progress to endstage renal failure. There have been no population based survey estimates in the UK.

Objective To determine nationally-representative population prevalence of CKD in adults in England, overall and by age, gender, and socio–economic status. To compare estimates using the current routinely used equation for assessing kidney function (Modification of Diet in Renal Disease (MDRD)) with a new more accurate equation (Chronic Kidney Disease Epidemiology Collaboration (CKDEPi)).

Design Cross-sectional survey using 2009 Health Survey for England with multistage probability sampling to obtain nationally representative estimates. Serum creatinine was measured in one laboratory by an enzymatic method calibrated to international standard (isotope dilution mass spectrometry (IDMS)). Glomerular filtration rate eGFR was calculated by the MDRD and CKDEPi equations. Albuminuria was urine concentration >2.5 mg/mmol in males and >3.5 mg/mmol in females. Estimates were weighted for non-response and sampling; and directly age sex standardised using Office for National Statistics (ONS) mid-year 2008 population estimates for England. Socio-economic status was assessed by household income, weighted for the number of adults and children in the household.

Subjects Adults 16+. Of 4645 adults interviewed, 2446 (53%) had a single blood test and 2864 (61%) provided a urine sample.

Main outcomes Prevalence of CKD stage 3–5 (eGFR <60 ml/min/1.73 m^2). Prevalence of albuminuria and CKD stage 1–5 (Stage 1 and 2 eGFR>60 ml/min/1.73 m^2 with albuminuria).

Results Prevalence of MDRD CKD stage 3–5 was 6% (5% in males, 7% in females). It varied with age, ranging from 1% of males and 2% of females aged 16–54 to 31% of males and 36% of females aged 75 and over. There was an inverse socio-economic gradient. CKD stage 4–5 (eGFR<30) was rare. Prevalence of CKDEPi was slightly lower especially in females and at younger ages. Prevalence of albuminuria was 9%, higher in males (10% vs 8%) and with a strong inverse