adjusted odds ratio (OR) = 0.62, 95% CI: 0.52 to 0.74) and a lower proportion of survived one year (43% v 27%; OR=0.78; 0.68 to 0.89). Urgency of GP referral did not affect treatment intent or survival. Routes to diagnosis varied across the 30 cancer networks, with the proportion of patients diagnosed after emergency admission ranging from 8.7% to 32.3%.

Conclusion Outcomes for cancer patients are worse if diagnosed after emergency admission. Networks should examine the causes of large regional variations to reduce rates of diagnosis after emergency admission.

PS38 SARCOPENIC OBESITY AND RISK OF ALL-CAUSE AND CARDIOVASCULAR MORTALITY IN OLDER MEN

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Background Sarcopenic obesity refers to the age-associated loss of muscle mass coupled with high adiposity levels. Although it is known that both obesity and low muscle mass are associated with increased mortality, few studies to date have examined the combined effects of sarcopenia and obesity on all-cause or cardiovascular mortality. We examined the relationship between sarcopenic obesity and all-cause and cardiovascular mortality in older men.

Methods 4,252 men from the British Regional Heart Study, aged 60–79 years in 1998–2000, were followed prospectively until 2011 for mortality. At baseline, midarm muscle circumference (MAMC) measurement was used to provide information on muscle mass and measurement of bioelectrical impedance analysis (BIA) to provide fat free mass index. Obesity was assessed by measurement of body mass index (BMI), waist circumference (WC), and BIA (providing fat mass, FM, index). Participants were classified as either normal, sarcopenic, obese, or sarcopenic obese using varying measures of adiposity and muscle mass, since no consensus definition for sarcopenic obesity exists. Associations between the four sarcopenic obesity groups and mortality rates (all-cause and cardiovascular) were examined using Cox regression, adjusting for age, smoking, alcohol intake, social class and physical activity.

Results There were 1,456 deaths during follow-up (mean=10.1years), 578 (40%) of which were cardiovascular. Obesity (assessed by BMI, WC and FM index) was not significantly associated with all-cause mortality, but BMI and WC were significantly associated with cardiovascular mortality ($p<0.05$). Low muscle mass (MAMC only) was significantly associated with all-cause mortality ($p<0.001$) but not with cardiovascular mortality. Sarcopenic obese men (MAMC ≤24.95cm; WC>102cm) had the greatest relative risk of all-cause mortality (RR: 1.66, 95% CI:1.23–2.25). Risks of all-cause mortality were also increased among men who were sarcopenic only (RR: 1.25, 95% CI:1.09–1.43) and obese only (RR:1.44, 95% CI:1.25–1.64) compared with normal men. Similar, though weaker, relationships were seen using MAMC and BMI to define sarcopenic obesity, but not when using combined BIA measures. Sarcopenic obese men had a less marked excess cardiovascular mortality risk (RR: 1.20, 95% CI:0.69–2.08), compared with obese men (RR: 1.35, 95% CI:1.09–1.67).

Conclusion Sarcopenic obese older men are at an increased risk of all-cause mortality compared with those with only sarcopenia or obesity or normal body composition. MAMC and WC appeared to be the best markers of muscle mass and obesity for predicting all-cause mortality, compared with BMI and BIA measures. The added effect of sarcopenia and obesity, however, did not have a synergistic effect on cardiovascular mortality. Efforts to promote healthy ageing in the elderly should focus on both preventing obesity and maintaining muscle mass.

PS39 ALCOHOL AND HARM TO OTHERS IN RUSSIA: LONGITUDINAL ANALYSIS OF COUPLE DRINKING AND SUBSEQUENT DIVORCE

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Background In Russia male drinking patterns have serious negative health effects; however the impact of alcohol on divorce is relatively unexplored. In other settings heavy drinking and discrepant drinking within couples increases the probability of marital breakdown. Longitudinal data, rather than cross-sectional, is preferable to establish the direction of any causal link.

Methods The association between married couple drinking patterns and subsequent divorce was investigated in a national population-based panel study in Russia. Follow-up data on 4,266 married couples was extracted from 14 consecutive annual rounds (1994–2009) of the Russian Longitudinal Monitoring Survey. The overall follow-up rate of couples was 90%, and loss to follow-up was unrelated to drinking behaviour. At interview couples provided information about family relationships, drinking habits in the last 30 days and socio-demographic variables. Discrete time hazard models were fitted using pooled logistic regression to estimate the probability of divorce among married couples as a function of the previous round's drinking patterns and other covariates.

Results Increased odds of divorce were associated with greater frequency of husband drinking ($P<0.001$) and greater frequency of wife drinking ($P<0.001$), and remained significant after mutual adjustment. Wife's hazardous drinking was also associated with a higher risk of divorce (OR 1.45, 95% CI 1.06–1.92) after adjustment for husband's drinking. Husbands who were abstainers also had raised odds of divorce compared to moderate drinkers (OR 1.36, CI 1.01–1.84). There was a significant positive relationship between husband's maximum daily volume of ethanol from vodka and divorce, after adjustment for frequency. After testing for interaction between husband's and wife's drinking, there was no evidence that couples with discrepant drinking frequencies had increased risk of divorce.

Conclusion This study adds to the very sparse literature investigating the association of drinking with divorce using longitudinal data. The results suggest that in Russia heavy and frequent drinking of both husbands and wives put couples at greater risk of future divorce. The thresholds where frequency and volume adversely affect marital stability are higher in husbands, than in wives. Male abstainers have a higher degree of marital dysfunction, lending support to the idea that many Russian male abstainers are ex-drinkers. More research is needed to understand the causal pathways from drinking to marital breakdown in Russia, and the overall population-level impact of drinking on partnerships.

PS40 PROFILES OF POLYDRUG USE AT A LOCAL AND A NATIONAL LEVEL: RISK FACTORS AND ASSOCIATIONS WITH MENTAL HEALTH AND FUNCTIONING

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Background Polydrug use is an understudied phenomenon with potential implications for individual functioning and health. Its frequency within the general public and its individual costs thus need to be documented. This study's aims were to compare the types of polydrug users in the general public at a national and a local level, and to examine how risk factors and impairments differed between them.

Methods Using comparable datasets from a local community in South East London during 2008–2010 (n=1,698) and from England in 2007 (n=7,403), latent class analysis was used to construct profiles of polydrug users. Eight binary indices reporting drug use in the last year for cannabis, amphetamine, cocaine, ecstasy, LSD, tranquilisers, crack, heroin, and two items for hazardous alcohol drinking and current cigarette smoking, were regressed on a latent variable of polydrug use with age and sex covariates. The latent class solution from each dataset was then used in a multinomial logistic regression comparing risk factors from socio-demographic, neighbourhood, social support, and mental health domains.

Results Both datasets produced three class solutions with comparable proportions: in London, 61.6% were in the "Nondrug user" group, 30.5% in the "Moderate user group" (characterised by hazardous drinking, cigarettes and some cannabis use) and 7.9% in the "High Drug User" group (characterised by drug use across all substances); in the national dataset the proportions were 57.4%, 37.9 %, and 4.6% respectively. In a logistic regression comparing both polydrug user groups to the nonuser group, both samples reported higher odds for polydrug use and common mental disorder, suicidal ideation, and functional limitation; higher levels of education, stressful life events and a never-married status were also associated with polydrug use. Differences between the local and national samples for polydrug use were found on factors such as ethnicity, social support, and employment status. Further analysis revealed no difference between the "Moderate" and "High Drug" groups in the local sample for these risk factors and mental health indicators, whereas several dose-response relationships between these groups were found nationally.

Conclusion Approximately a third of the general public both nationally and locally exhibit a pattern of moderate polydrug use associated with mental health and daily functioning impairments. Furthermore, local services and policy makers should note that higher education is a risk factor for polydrug use, and that factors related to employment and social support may be differentially linked to substance use depending on geographical residence.

PS41 CHARACTERISTICS ASSOCIATED WITH STATIN PRESCRIBING FOR PRIMARY PREVENTION OF CARDIOVASCULAR DISEASE AMONG PEOPLE WITH DIABETES

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Background Diabetes is a risk factor for cardiovascular disease (CVD) and guidelines recommend that people with diabetes ought to have their blood lipid levels monitored and, if necessary, controlled to ensure that they are at a safe level to prevent avoidable morbidity and mortality resulting from CVD. Guidelines are not necessarily followed and the differences in treatment which this leads to could give rise to health inequalities according to socioeconomic status, sex, or other patient characteristics. This study investigated the association between patient characteristics and statin prescribing in people who were eligible to receive a statin for primary prevention of CVD according to the contemporary Scottish Intercollegiate Guideline Network guidelines (*SIGN 55*).

Methods Data from the Scottish Care Information – Diabetes Collaboration dataset for the period 2000–2007 were used. This dataset contains socio-demographic and prescribing data for 203,528 people, which is almost every person with diagnosed diabetes in Scotland. The analyses were based on people over 40 years of age, with complete data, with no history of CVD, and with total serum cholesterol exceeding 5mmol/l.

Logistic regression was used to calculate odds ratios (OR) for ever having a record of a statin prescription by age, sex, socioeconomic status (defined using quintiles of the Scottish Index of Multiple Deprivation, SIMD, where Q1 reflects the most deprived and Q5 the most affluent), smoking habits, body mass index, diastolic blood pressure, and type of diabetes.

Results Of 83,666 people identified as eligible for statin treatment as defined by SIGN 55 guidelines, 29% had no record of a statin prescription. In both men and women, the OR for having a statin prescribed when compared to Q1 from multi-variate models were OR_{men} 0.93 OR_{women} 0.91 for Q2, OR_{men} 0.77 OR_{women} 0.77 for Q3, and OR_{men} 0.71 OR_{women} 0.71 for Q4. Current and former smokers, overweight and obese people, and people with high blood pressure or treated hypertension had greater odds of statin prescription, whereas underweight people and women with type one diabetes had reduced odds of being prescribed a statin than each comparison group.

Conclusion Almost one third of people with diagnosed diabetes have no record of having ever received a statin prescription as recommended by SIGN 55. The odds of having a record of treatment were higher among more deprived people even after adjusting for potential confounding factors.

PS42 INEQUALITIES IN CHILD OBESITY: WHERE DO THESE OCCUR AND IS THE GAP WIDENING?

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Background Child obesity is an important public health problem. Of particular concern are the considerable inequalities in obesity prevalence between socioeconomic and ethnic groups. The Department of Health's recently published *Call to Action on Obesity* makes a commitment to achieving a sustained downward trend in the level of excess weight in children and states that it is vital that action on obesity reduces health inequalities.

Methods This analysis uses data collected by the National Child Measurement Programme (NCMP). The NCMP is an annual programme that measures the height and weight of children aged 4–5 years (Reception) and 10–11 years (Year 6) in schools in England. Approximately one million children are measured every year.

The NCMP collects information on ethnicity and place of residence for each child. Five years of good quality data are now available (2006/07, 2007/08, 2008/09, 2009/10, 2010/11) and these have been analysed in detail by the National Obesity Observatory to examine how patterns of child obesity prevalence vary by demographic and socioeconomic group.

Results Obesity prevalence among children who live in the most deprived areas of England is approximately twice that of children living in the least deprived areas. NCMP data suggest that health inequalities among boys in Reception and girls in Year 6 are widening. Health inequalities do not seem to be widening or narrowing for girls in Reception or boys in Year 6 but substantial health inequalities do persist among these groups.

When all years of NCMP measurements are considered the Bangladeshi ethnic group seems to have shown the greatest increases over time. Children in the 'White Other' ethnic group appear to be experiencing a decrease in obesity prevalence.

Conclusion In order to achieve a reduction in obesity prevalence among children a particular focus on deprived groups may be required. This would help tackle persistent health inequalities. Children from the Bangladeshi ethnic group may benefit from particular attention, given the evidence that obesity prevalence is increasing for these children at a greater rate than for other ethnic groups.

PS43 WHAT IS IMPORTANT TO THE QUALITY OF LIFE OF PEOPLE WITH MULTIPLE MYELOMA? IMPLICATIONS FOR THE DESIGN OF QUALITY OF LIFE QUESTIONNAIRES

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