possibly reflecting its availability as the only combination PI accessible in tablet/liquid form. Current use of PIs was associated (p<0.001) with hypercholesterolaemia in adjusted analyses indicating a long-term consequence of specific ART.

Conclusions The majority of subjects had been managed with ART, with first exposure occurring at an early age. At least a quarter of participants had been treated with multiple individual drugs suggesting cumulative exposure and switching between regimens. The most prevalent treatment approach at recruitment was cART. However, there is evidence of continued use of suboptimal management strategies, and hypercholesterolaemia being associated with PI use.

P24 A CLUSTER-RANDOMISED CONTROLLED TRIAL TO TEST THE EFFECTIVENESS OF A HAND WASHING INTERVENTION IN REDUCING INFECTION-RELATED ABSENCE IN PRIMARY SCHOOLS: INSIGHTS FROM AN EMBEDDED PROCESS EVALUATION

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Objective To conduct a qualitative process evaluation within a cluster-randomised trial of an educational resource intervention to promote hand washing in primary schools and thus reduce absenteeism by reducing the transmission of respiratory and gastrointestinal infections.

Design Focus groups with pupils including drawings of hand washing facilities, semi-structured interviews with teachers, direct observation of intervention delivery and hand washing facilities.

Setting State primary schools within six local authority areas in the South West of England (n=178) were randomised to receive the "Hands up for Max!" intervention in October 2009 (intervention schools) or in Autumn 2010 after all trial follow-up data are collected (control schools). Four intervention and four control schools were selected for the process evaluation from the 24 schools participating in a substudy to collect enhanced absenteeism data.

Participants Pupils in years 2 to 6 (n=95), and key stage 1 (n=8) and key stage 2 (n=8) teachers.

Main Outcome Measures The process evaluation examined how the "Hands up for Max!" educational resource was delivered in intervention schools and explored responses to the intervention among pupils and staff. Ideas, attitudes, knowledge and behaviours relating to hand hygiene and hand washing facilities were explored, and hand washing facilities were observed in both intervention and control schools.

Results The "Hands up for Max!" resource was well received by the intervention schools, although some teachers made useful suggestions for improvements. Schools differed in the way they delivered the intervention and the number of elements of the resource package they used. Pupils in intervention schools recalled learning about the importance of hand washing in reducing the spread of infections and were able to describe, in detail, how to wash their hands properly. In the focus groups, pupils provided insight into reasons why they may not wash their hands, and what might help people wash their hands properly. Use of drawings in the focus groups facilitated discussion about what pupils liked and did not like about the facilities where they washed their hands. Results of the process evaluation were also used to inform development of questionnaires to obtain quantitative data from pupils and staff in all 178 schools participating in the trial.

Conclusion Information from the process evaluation will be useful in understanding any observed differences in quantitative outcomes related to absenteeism and knowledge, attitudes and behaviours related to hand washing, between intervention and control schools.

P25 ANTIBIOTIC PRESCRIBING IN IRISH CHILDREN RECEIVING FREE MEDICAL CARE

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Objective High rates of antibiotic prescribing are an increasing worldwide concern, in terms of increased antimicrobial resistance and associated burden to health services. However, there remains a lack of paediatric population-based pharmacoepidemiological research. The aim of the current study is to determine trends in systemic antibiotic prescribing in Irish children.

Design Retrospective analysis of routinely collected data.

Participants Data were obtained from the General Medical Services (GMS) claims database. This represents patients who are unable to pay for medical services and accounts for about one third of Irish children. Data were obtained from 2004 to 2008, for about 271 000 children per year aged ≤15.

Main Outcome Antibiotic prescribing behaviour in a paediatric population.

Results Prescribing rates of systemic antibiotics were compared across years, age (0–4, 5–11, 12–15) and gender and are presented with CI and significance values (using negative binomial regression analysis). In 2004, 631/1000 population (95% CI 628 to 634) received at least one antibiotic prescription compared to 578/1000 (95% CI 575 to 581) in 2008. However, the overall trend across the 5-year period did not show a significant change (IRR 0.99, 95% CI 0.96 to 1.0, p=0.23). No significant difference was observed between males (620/1000, 95% CI 618 to 622) and females (631/1000, 95% CI 629 to 633; IRR 1.02, 95% CI 0.97 to 1.06, p=0.46). However, prevalence rates significantly decreased with age. Children in the 0–4 age group were significantly more likely to receive an antibiotic prescription (827/1000, 95% CI 824 to 829), relative to the 5–11-year old (553/1000, 95% CI 552 to 556) and 12–15 years (489/1000, 95% CI 487 to 492), with all p<0.001. The net ingredient cost of antibiotics increased from €2.3 million in 2004 to €2.8 million in 2008. The five most commonly prescribed drugs were as follows: amoxicillin (298/1000, 95% CI 297 to 299), co-amoxiclav (296/1000, 95% CI 295 to 296), cefaclor (135/1000, 95% CI 134 to 136), clarithromycin (54/1000, 95% CI 53 to 54) and phenoxymethylpenicillin (53/1000, 95% CI 52 to 53). The overall rates observed here are significantly higher than those reported elsewhere in Europe. For example, the Netherlands (178/1000), Denmark (328/1000) and Scotland (142/1000) consistently report low antibiotic prescribing rates. The choice of agents also differed between countries.

Conclusions Prescribing rates remained stable over the 5-year period. Although the rates observed here are higher than European comparisons, these results should be considered in the context of the GMS population. Nevertheless, the results suggest the possible overuse of antibiotics within the GMS population and the potential benefit from interventions to reduce prescribing.

Older people

P26 INTERVENTIONS TO IMPROVE PRESCRIBING QUALITY IN CARE HOMES: A SYSTEMATIC REVIEW

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Introduction Prescribing in the elderly population is a complex process and the prevalence of inappropriate prescribing is high, with