multidimensionality of QoL can be assessed properly this way; especially in this specific situation where the owners are proxy reporters but also responsible for the well-being of the animal and therefore likely to be biased.

HEALTH CARE INTERVENTIONS—Health Care Use & Policy Studies

PHC12

STARR PROCEDURE FOR OBSTRUCTED DEFAECATION SYNDROME (ODS): 12-MONTH FOLLOW-UP

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OBJECTIVE: A European STARR registry was set-up to determine the short-term safety and effectiveness of the STARR procedure for obstructed defaecation syndrome. **METHODS:** STARR registries in Italy, Germany and the UK were designed with a web-based interface to allow pooling of results for combined analysis. Recruitment commenced in January 2006. Data collection included a symptom severity score (SSS), obstructed defaecation score (ODS), Cleveland clinic incontinence score, symptom-specific (PAC-QoL) and generic (ED-5Q utility and VAS) QoL score. All complications were recorded. Data collection was performed at baseline, 6 weeks, and 6 and 12 months. **RESULTS:** A total of 1456 patients were recruited and eligible for analysis. There were 214 (14.7%) male patients. The mean age was 54 yrs (range: 17–92). Mean operative time was 44mins (range: 15–210). Average length of stay was 3 days (range:1–36). By September 2007, 698 (48%) and 422 (29%) were eligible for analysis at 6 and 12 months. respectively. A significant symptomatic improvement was seen between baseline and 6 months and maintained at 12 months (SSS: baseline 24.1 (95%CI: 23.8,24.4) v's 12 months 12.5 (95%CI: 12.1,12.9), $p < 0.001$; ODS: baseline 15.3 (95%CI: 14.9,15.6) v's 12 months 5.8 (95%CI: 4.8,6.7), $p < 0.001$. This was reflected in a significant improvement in both PAC-QoL and ED-5Q QoL scores at both 6 and 12 months. Incontinence scores improved from 3.1 (95%CI: 2.9,3.3) at baseline to 2.9 (95%CI: 2.1,2.7) at 6 months and 1.9 (95%CI: 1.5,2.2) at 12 months ($p < 0.001$). 457 minor and major complications were reported, of which the most frequent were: unexpected pain (7.7%), urinary retention (6.8%), bleeding (4.5%), stapled line complications (3.2%), sepsis (1.4%), incontinence (1.3%). Postoperative defaecatory urgency was reported in 17% of patients. There was no mortality. **CONCLUSION:** STARR for ODS is safe,effective and significant improvement in QoL.

INDIVIDUAL'S HEALTH—Clinical Outcomes Studies

PIH1

PREVENTION OF FALLS AND FALL-RELATED INJURIES IN THE COMMUNITY-DWELLING ELDERLY: A REVIEW

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OBJECTIVE: As part of a broader analysis on aging in the community, the purpose is to perform a literature review to assess the effectiveness of interventions designed to prevent falls and fall-related injuries in community-dwelling elderly individuals. **METHODS:** A search was performed in OVID MEDLINE, MEDLINE In-Process and Other Non-Indexed Citations, EMBASE, CINAHL, Cochrane Library, and INAHTA/NHS EED between January 2000 and September 2007. Furthermore, all studies included in a Cochrane review published in 2003 were considered for inclusion. Studies were included if they were controlled trials in a population of community dwelling elderly and examined falls or fall-related injuries as an outcome. **RESULTS:** Fifty-nine studies were identified investigating the effectiveness of nine interventions. A meta-analysis found that exercise programs effectively reduced falls if they were 6 months or longer in duration (RR = 0.84 [95% CI: 0.76–0.93]) or were offered to the general population and not a high risk group (RR = 0.79 [0.70–0.90]). Environmental modifications were effective in individuals with a history of falls (RR = 0.66 [0.54–0.81]), and a gait stabilizing device for outdoor winter use effectively reduced falls (RR = 0.43 [0.29–0.64]) and injurious falls (RR = 0.10 [0.01–0.74]). Although neither hormone replacement therapy or vitamin D alone reduced falls or injuries, vitamin D plus calcium supplementation resulted in a reduction in the number of falls (RR = 0.83 [0.73–0.95]) and fractures (RR = 0.60 [0.39, 0.94]). Multifactorial interventions were only marginally effective in reducing falls in a high risk population (RR = 0.87 [0.76–1.01]), and there was no evidence that vision interventions or hip protectors were effective. **CONCLUSION:** Several interventions were identified which reduce the risk of falls and fall-related injuries in community-dwelling elderly, however special consideration must be given to the intervention duration and population risk profile when determining the most appropriate interventions to implement. An economic analysis that informs investment decisions to maximize the impact of reducing falls is currently underway.

PIH2

CONTRACEPTIVE FAILURE RATES AMONG MEDICAID AND NON-MEDICAID ENROLLEES

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OBJECTIVE: Contraceptive efficacy depends both on patient compliance and the characteristics of the method used. Efficacy rates can thus vary across different populations, particularly in women employing user-dependent methods (i.e., oral, condoms). This study measured the contraceptive failure rates in a Medicaid and a non-Medicaid population and evaluated the efficacy variance between the two groups. **METHODS:** Monthly contraceptive-use histories were constructed for all women using data from the 2002 National Survey of Family Growth (NSFG VI). Contraceptive use was defined by first contraception method mentioned in the survey. Poly-modal use was not defined. Women were classified as Medicaid enrollees if they reported having Medicaid coverage in the 12 months prior to the survey, or reported Medicaid payment for services. The final dataset included 1208 Medicaid-enrolled women and 6435 non-Medicaid enrolled women. Pregnancy rates were calculated each month and then annualized for women using user-dependent methods (oral contraceptives [OC], condom) or non-daily methods (IUD, injected, implanted birth control). **RESULTS:** Average annual contraceptive failure rates for Medicaid vs. non-Medicaid women were: oral pill—1.15% vs 0.13% ($p = 0.0051$); condom—2.05% vs. 0.55% ($p = 0.0015$); IUD—0.52% vs. 0.16% ($p = 0.5156$); injected or implanted—0.27% vs. 0.13% ($p = 0.3940$). OC failure rate was nearly 9-times higher in the Medicaid population than in the non-Medicaid population. Failures rates for IUD, injectables and implants were also higher but

the differences were not statistically significant. **CONCLUSION:** Study results largely correspond to previous published estimates (i.e., Trussell, 2004). Contraception failure rates for user-dependent methods were substantially greater in a Medicaid population than those in a non-Medicaid plan. The efficacy rates of non-daily methods were not statistically different across the two populations and thus may be the more appropriate option for a Medicaid patient or other patient subpopulations shown to have compliance issues.

PIH3

HOSPITALIZATIONS AND MORTALITY ASSOCIATED WITH INCIDENT POTENTIALLY INAPPROPRIATE MEDICATIONS USE AMONG ELDERLY INDIANA MEDICAID BENEFICIARIES RESIDING IN NURSING HOMES

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OBJECTIVE: Most studies of potentially inappropriate medications (PIMs) among older adults have focused on prevalence rather than incidence. This study determined one-year incidence of PIMs use among Indiana Medicaid beneficiaries 65 years old or older who resided in nursing homes and examined associations between incident PIM use and hospitalizations and mortality. **METHODS:** A retrospective analysis was conducted using Indiana Medicaid claims and enrollment files. Individuals were included in the sample if they were 65 years old or older, received Medicaid covered nursing home services from October 2002 through 12 months after starting a PIM in 2003 or until death in 2003, and were prescribed at least one new medication in 2003. Individuals who received any PIM in the three months prior to January 2003 were excluded. The 2003 Beers criteria were used to identify PIMs. Associations between incident PIM use, hospitalization and mortality were assessed using logistic regression models that controlled for age, gender, race, marital status, Charlson comorbidity scores, number of medications prescribed in 2003, and nursing home location. Selection bias was examined using seemingly unrelated bivariate probit models. STATA Intercooled for Windows was used for all statistical analyses. **RESULTS:** The study sample consisted of 7594 individuals. One-year incidence PIM use was 42.1%. Rhos, correlations of error terms from equations predicting hospitalizations and mortality, were not significant indicating no selection bias. Incident PIM users were more likely to be hospitalized (odds ratio {OR} = 1.27, 95% C.I. 1.10–1.47) and more likely to die (OR = 1.45, 95% C.I. 1.31–1.61) in 12 months after controlling for demographic and clinical characteristics. **CONCLUSION:** Incidence of PIM prescribing was high among elderly Indiana Medicaid beneficiaries residing in nursing homes. Individuals who began use of a PIM in 2003 were at a higher risk of hospitalization and at higher risk of dying.

PIH4

COMPARISON OF MEN AGE 21 YEARS AND OLDER WITH AND WITHOUT ERECTILE DYSFUNCTION ON CONCOMITANT PRESCRIPTION DRUG, COMORBID CONDITIONS, SMOKING STATUS AND BMI

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OBJECTIVE: Comparison of data collected in a electronic medical record (EMR) database on men age 21 years and older with and without erectile dysfunction (ED) on concomitant drug prescription, co-morbid conditions, smoking status and BMI. **METHODS:** A retrospective review of the General Electric Centricity MQIC research database containing the ambulatory health records of US patients was conducted. ED patients age 21 and older were identified by diagnosis, PDE5 and/or both; ≥18 month of activity and smoking status was required. Two non-ED age-matched (within +/–2 years) controls were randomly selected for and linked to each case. A matched case-control analysis was conducted using conditional logistic regression, with goodness of fit and residual analyses used to test validity and assumptions. **RESULTS:** Non-smokers compared to current smokers were less likely to develop ED. There was an increase odds of ED with each unit increase in BMI. Men with BMI 30–39.9 had the highest risk of ED (2.14 OR, 1.73–2.64 95% CI) compared to those with BMI ≤ 18.5. Antihypertensive, lipid lowering agents and diuretics had the highest relative odds for ED respectively (2.43 OR, 2.34–2.5 95% CI; 1.57 OR, 1.52–1.62 95% CI; 1.44 OR, 1.37–1.5 95% CI). None of the other risk factors or co-morbid conditions (cerebrovascular disease, kidney disease, anti-arrhythmics, and anti-neoplastics) was found to increase the risk of ED. **CONCLUSION:** EMR data provides a means for assessing risk factors for and associated conditions consistent with ED in a real-world setting, including the links between this condition and commonly used prescription drugs. The likelihood of developing ED was less for non-smokers and increased with increasing BMI and the use of antihypertensives, lipid lowering agents and diuretics.

PIH5

THE EFFECT OF INJURY SEVERITY ON THE INCIDENCE AND RESOURCE UTILIZATION-RELATED OUTCOMES OF DEEP VEIN THROMBOSIS AMONG PEDIATRIC TRAUMA ADMISSIONS IN THE UNITED STATES

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OBJECTIVE: To generate national estimates of the effect of injury severity on the incidence and associated resource utilization-related outcomes of deep vein thrombosis (DVT) among pediatric traumatic injury inpatient admissions in the United States. **METHODS:** Data from the 2003 HCUP KID dataset were analyzed for 240,387 hospital stays (unweighted = 146,512) for traumatic injury in patients ≤20 years old. Among these hospitalizations, cases of DVT were identified. Injury severity scores (ISS) were calculated using the ICDMAP90 software; four mutually exclusive categories corresponding to increasing severity were created. Weighted regression models estimated the effect of injury severity on the likelihood of DVT, controlling for patient- and hospital-specific characteristics. Additional models including interaction terms for DVT/injury severity category estimated the joint effect of these parameters on total costs and LOS. **RESULTS:** Among traumatic injuries identified, 648 patients (0.27%) had an ICD-9-CM code consistent with DVT, similar to previous estimates in the literature. Among observations with complete data, moderate [ISS = 9–15], severe [ISS = 16–24] and critical [ISS = 25+]) injuries increased the likelihood of DVT (Odds Ratio [p-value] = 2.13 [<0.0001], 2.49 [0.0001], and 3.53 [<0.0001], respectively), as compared to minor injuries (ISS = 0–8). Relative to minor injuries, severe and critical injuries among those with DVT (i.e., interactive effects) were associated with increased LOS. DVT and increasing severity each independently increased total costs, but interactive effects were not significant. **CONCLUSION:** In this study we quantify the effect of injury severity on the incidence and utilization-related outcomes of DVT among