statistically significantly higher rates of therapy addition compared to the non-IPH group (2.1% vs. 0.9%, p<0.0001), switches in therapy (2.3% vs. 0.6%, p<0.0001) and treatment discontinuations (3.9% and 3.2%, p=0.001). There were multiple statistically significant differences between the IPH and non-IPH groups across several antidiabetic drug classes regarding therapy addition, switch or discontinuation. For example, IPH patients were 12.5 times more likely to add basal insulin compared to non-IPH patients (95% CI, 3.7 - 42.4, p<0.0001).

CONCLUSIONS: Inpatient admission of patients with T2DM was associated with more frequent treatment modifications to their pre-admission treatment regimen compared to a matched cohort of patients without inpatient admissions. An inpatient admission represents an opportunity to modify pre-admission diabetic treatment regimens. Future studies are needed to determine if such modifications are associated with improvements in patient outcomes.

PHS169
RESOURCES USE AND OUTCOMES OF TREATMENT OF COMPLEX-PERSONALIZED PREGNANCY IN RUSSIA: A RETROSPECTIVE FIELD STUDY
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OBJECTIVES: We conducted a retrospective chart review in a central Russian region of Tver for samples of 500 and 400 patients treated in inpatient and outpatient settings respectively. All patients were aged 18 years and older and were not transferred from a hospital or previously hospitalized in the past 2 weeks. Data were collected regarding age, gender, comorbidities, referral patterns, outcomes, resource use, employment status, and productivity loss.

RESULTS: Among inpatient and ambulatory episodes the mean age was 38 years and 55.2% were males. 47.5% had at least 1 comorbidity, 75.0% of inpatient and 68.8% of outpatient cases were at moderate/high risk of pneumonia. The overall length of stay among inpatient cases was 13.6 days. Mean length of stay was similar across age groups and by risk categories. Outpatient stay was an average of 5.1 days, including one X-ray per case, and an average 8.4 days of antibiotic therapy. Employed patients below retirement age comprised 12.8% and 18.3% of the inpatient and outpatient cases, respectively, and days lost from work per patient of working age was 8.0 (inpatient) and 7.0 (outpatient).

CONCLUSIONS: CAP is a significant cause of health care utilization in adults in Russia. Most CAP patients have chronic comorbidities. Resource utilization was similar across age and risk groups.

PHS170
RHEUMATOID ARTHRITIS PATHWAY PROGRAM IMPACT ON PATTERNS OF CARE
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OBJECTIVES: To analyze the feasibility of a collaborative evidence-based consensus-driven interdisciplinary pathway program in rheumatoid arthritis (RA). Un可持续 cost trends in health care have been the focus of much debate. RA has been a particular target of these efforts.

METHODS: We conducted a retrospective chart review in a central Russian region of Tver for samples of 500 and 400 patients treated in inpatient and outpatient settings respectively. All patients were aged 18 years and older and were not transferred from a hospital or previously hospitalized in the past 2 weeks. Data were collected regarding age, gender, comorbidities, referral patterns, outcomes, resource use, employment status, and productivity loss.

RESULTS: Among inpatient and ambulatory episodes the mean age was 38 years and 55.2% were males. 47.5% had at least 1 comorbidity, 75.0% of inpatient and 68.8% of outpatient cases were at moderate/high risk of pneumonia. The overall length of stay among inpatient cases was 13.6 days. Mean length of stay was similar across age groups and by risk categories. Outpatient stay was an average of 5.1 days, including one X-ray per case, and an average 8.4 days of antibiotic therapy. Employed patients below retirement age comprised 12.8% and 18.3% of the inpatient and outpatient cases, respectively, and days lost from work per patient of working age was 8.0 (inpatient) and 7.0 (outpatient).

CONCLUSIONS: CAP is a significant cause of health care utilization in adults in Russia. Most CAP patients have chronic comorbidities. Resource utilization was similar across age and risk groups.

PHI
THE ASSOCIATION BETWEEN SLEEP PROBLEMS, SLEEP MEDICATIONS AND FALLS IN COMMUNITY-DWELLING OLDER ADULTS: RESULTS FROM THE HEALTH AND RETIREMENT STUDY 2010
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OBJECTIVES: To determine the prevalence of sleep problems, use of sleep medications and falls and to evaluate the association between sleep problems, sleep medications, and falls in adults aged 65 or older.

METHODS: The study population comprised a nationally representative sample of non-institutionalized adults aged 65 years or older participating in the 2010 Health and Retirement Study. Prevalence of sleep problems, sleep medication use and falls was calculated. Logistic regression modeling was used to examine the effect of sleep problems, sleep medications, and both on the risk of falls after controlling for covariates. Statistical analysis was performed in R using the SAS 9.4 statistical software. RESULTS: Of 1879 living older adults, 36% had fallen in the past two years. 71% reported sleep problems and 21% reported taking medications or other treatments to help sleep. Older adults who do not report sleep problems and take sleep medications (OR=1.28, 95%CI=1.07-1.54) have a significant risk of falls, compared to older adults who do not have sleep problems and do not take sleep medications.

CONCLUSIONS: Sleep problems, use of sleep medications, and occurrence of falls are common among older adults. Consistent with previous literature, sleep medication use predicted falls. However, those with sleep problems not taking sleep medication did not have significant risk of falls as has been previously reported. Health care professionals should consider medication-associated risk when treating sleep problems in older adults.

PH2A
CARDIOVASCULAR AGENTS – MOST COMMON CLASS INVOLVED IN ADVERSE DRUG REACTIONS IN INDIAN ELDERLY INPATIENTS
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RESULTS: Of the total 1510 inpatient patients evaluated, 228 ADRs were noted in 197 patients. The prevalence of ADRs in Indian elderly inpatients was found to be 13%. Type A ADRs accounted for 85% of the total ADRs. The most frequently occurring ADR was hypotension. The 3 most frequently occurring classes in ADRs were cardiovascular (CVS) drugs (70%), followed by blood and blood forming organs (12%) and Anti-infectives (6.5%). Within the CVS drugs, antihypertensives, diuretics and lipid modifying drugs were the causative substances.

CONCLUSIONS: Cardiovascular agents were involved in drug associated ADRs in the elderly inpatients. In view of the fact that these drugs are well established in clinical practice, prevention of the CV illnesses seems to be the only route to minimize the adverse drug reactions for the Indian population.

PH2B
OVARIAN STIMULATION USE, INCLUDING CLOMIPHENE CITRATE, AND INTRAUTERINE INSEMINATION USE, AND THE RISK OF MULTIPLICITY AND MAJOR CONGENITAL MALFORMATIONS: A META-ANALYSIS
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OBJECTIVES: To describe the relationship between medically assisted reproduction (MAR) use and the risk of major congenital malformations (MCM) is controversial. Multiplicity is a recognized adverse effect of MAR, nevertheless, there is no consensus on the incremental risk. Our meta-analysis summarizes the literature on fertility treatment, and the risk of major congenital malformations for singles and twins with different combinations of treatment. We conducted a systematic review to identify published papers between 1966 and 2012 in Medline, Embase and Cochrane Central Register of Controlled Trials. We included observational and randomized clinical trials related to the risk of multiplicity or MCM conceived following ovarian stimulation (OS) alone, intrauterine insemination (IUI) and in vitro fertilization (IVF) with related procedures compared to spontaneously conceived infants or infants conceived using other MAR.

RESULTS: We identified 238 eligible studies. Among them, 186 reported data on IVF, 37 reported data on OS used alone and 21 on IUI use. Compared to natural conception, OS used alone was associated with a greatly increased risk of multiplicity (RR 11.07, 95% CI 6.94-17.67), major congenital anomalies of nervous system (RR 1.88, 95% CI 1.20-2.96) and major musculoskeletal malformations (RR 1.38, 95% CI 1.06-1.79). The risk of multiplicity further decrease and the risk of major musculoskeletal malformations increase when data were restricted to clomiphene citrate (the first line OS). Compared to natural conception, the use of IUI was associated with greatly increased risk of multiplicity (RR 5.79, 95% CI 2.63-12.64) and major congenital malformations (RR 1.66, 95% CI 1.26-2.18).

CONCLUSIONS: A limited number of observational studies focused on the risk of multiplicity and MCM following OS alone or IUI use. Results support the use with or without IUI increases the risk of multiple birth and some types of MCM.

PH2C
RISK OF FALLS AND FRACTURES ASSOCIATED WITH ANTICHOLINERGIC MEDICATION USE IN THE ELDERLY
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OBJECTIVES: Studies have shown that the use of psychotropic medications such as antidepressants and antipsychotics is associated with an increased risk of falls in older adults. However, very few studies have assessed the association with poor sleep, medications used to improve sleep, and the combined effect of these variables on the risk of falls. The objectives were: 1) to determine the prevalence of sleep problems, use of sleep medications and falls and 2) to evaluate the association between sleep problems, sleep medications, and falls in adults aged 65 or older.

METHODS: The study population comprised a nationally representative sample of non-institutionalized adults aged 65 years or older participating in the 2010 Health and Retirement Study. Prevalence of sleep problems, sleep medication use and falls was calculated. Logistic regression modeling was used to examine the effect of sleep problems, sleep medications, and both on the risk of falls after controlling for covariates. Statistical analysis was performed in R using the SAS 9.4 statistical software. RESULTS: Of 1879 living older adults, 36% had fallen in the past two years. 71% reported sleep problems and 21% reported taking medications or other treatments to help sleep. Older adults who do not report sleep problems and take sleep medications (OR=1.28, 95%CI=1.07-1.54) have a significant risk of falls, compared to older adults who do not have sleep problems and do not take sleep medications.

CONCLUSIONS: Sleep problems, use of sleep medications, and occurrence of falls are common among older adults. Consistent with previous literature, sleep medication use predicted falls. However, those with sleep problems not taking sleep medication did not have significant risk of falls as has been previously reported. Health care professionals should consider medication-associated risk when treating sleep problems in older adults.