the ACTs were the most dominant categories accounting for over 70% of market volume. SPS were the cheaper and most popular agents particularly in PMVs while the ACTs were the most prescribed agents dominant in retail pharmacies. The use of ACTs has become very significant, but still below the required policy level as the drugs of choice in malaria treatment, limited by high prices and inadequate information. Results confirm that in many countries access to ACTs is hindered by high prices for majority of the population in addition to limited information on their relative efficacy in malaria treatment. Procurement is the most determinant of high cost, making it the key policy target for improving access and reducing the effect of the AmfM will certainly boost access to the ACTs and would significantly change study findings.

**PIN94**

**VACCINATION COVERAGE IN COLOMBIA, OPPORTUNITY AND FACTORS ASSOCIATED: RESULTS FROM A NATIONAL SURVEY**

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**OBJECTIVES:** To estimate the coverage of the Expanded Programme on Immunization among children ≤5 years old in Colombia, to evaluate the opportunity of vaccination, and to identify factors associated with low coverage.

**METHODS:** We conducted a cross-sectional survey in 80 municipalities of Colombia, with census block groups as primary sampling units, and blocks as second stage sampled all children aged 12 months to five years in sampled blocks, and asked their providers to give children’s vaccination record cards, when available. We also collected basic socio-demographic information. All procedures adhered to international guidelines on ethical conduct. Data were collected using a semi-structured questionnaire in Colombia, School of Medicine.

**RESULTS:** Estimated coverage was good for vaccines scheduled during the first 15 months of life: BCG 93.2% (95%CI: 92–94.4), DTP/Hib/Hepl 89.6% (87–91.5), MMR 92.5% (90.8–94.2), yellow fever 85% (87–91.8), but was lower among older children: DTP first booster dose 85.1% (83.4–86.7), second booster dose 63.7% (57.7–70.2); MMR booster dose 52.9% (46.4–59.4). Opportunities for vaccination showed the results for: instant time administration of DTP/Hib/Hepl occurred in only 44.2% of the children evaluated (41.4–47.1), and MMR in 71.2% (68.9–73.4). Higher socioeconomic status, time living in the municipality, mother’s years of school completed, and affiliation to social security were associated with better vaccine coverage (p<0.003); children of internally displaced families, children pertaining to a minority, and those coming from families with greater number of siblings had lower coverage.

**CONCLUSIONS:** Vaccination coverage in children ≤5 months meets WHO goal of 90%, or is very close to it, though coverage in older children falls below that goal. Delayed immunization is a common problem in Colombia, which may result in reduced protection. There are few modifiable factors associated with low coverage, though the identification of vulnerable populations may help to improve the reach of immunization programs.

**PIN95**

**INVESTIGATING RATIONAL USE OF PRESCRIPTION DRUGS IN SAUDI MINISTRY OF HEALTH HOSPITALS USING WORLD HEALTH ORGANIZATION LEVEL-II INDICATORS; DOES THE PHARMACY AND THERAPEUTICS COMMITTEE HAVE AN IMPACT?**

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**OBJECTIVES:** Investigate rational use of prescription drugs in Ministry of Health (MOH) in Saudi Arabia, using WHO level II indicators, and whether these measures are related to Pharmacy and Therapeutics Committee (P&T) development level. **METHODS:** The study used retrospective data collected during 2003 from cross-sectional survey and prescriptions audit of 19 different outpatient settings of MOH hospitals in rural and urban areas, because of the scope of the study, we tested only 1 out of 12 indicators of WHO core drug use level II indicators (WHO/DAP/93.1); namely; the number of encounters with antibiotics and non-steroidal inflammatory drugs, and the prediction of the likelihood of antibiotics prescribing across hospital and patient characteristics.

**RESULTS:** Of 2850 patients, the average number of drugs prescribed per encounter was 2.41 higher than recommended target of WHO (<2). In hospitals serving rural areas, antibiotics prescribing rates were 21.5% and 37.5% of total encounters in urban and rural hospitals respectively (WHO recommended target -30%). Antibiotics utilization was significantly higher in rural areas and in both sexes. 

**CONCLUSIONS:** This study has identified the factors associated with irrational use of medications might exist in MOH hospitals, antibiotics overutilization in rural hospitals is an indication of it. The irrational prescribing might be associated with rural hospital areas, particularly at hospitals serving rural areas. Furthermore, lack of effective P&TC might contribute to irrational prescribing in hospitals serving both urban and rural areas. Adoption of effective formulary system is recommended including adopting effective P&TC and strict guidelines and monitoring of antibiotic use to mitigate the risk of antibiotics resistance.

**PIN96**

**THE IMPACT OF PSYCHIATRIC COMORBIDITIES ON THE TREATMENT OF HEPATITIS C VIRUS**

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**OBJECTIVES:** The potential for neuropsychiatric side effects may be a treatment limiting factor for Hepatitis C Virus (HCV) patients with psychiatric co-morbidities. This study’s primary objective was to compare treatment medication rates among HCV patients with and without psychiatric comorbidities. A secondary objective was assessing the impact of selection criteria on results.

**METHODS:** Adult Medicaid recipients with confirmed HCV infection from January 1, 2009 through June 30, 2011 and no interferon alfa (INF-a) treatment 6 months prior were identified using Truven Health MarketScan® Treatment Pathways. Patients without 6 hepatitis C virus (HCV) points, and with psychiatric HCV diagnoses were excluded. Post-index treatment rates given pre-index psychiatric comorbidity were calculated. Sensitivity analyses were performed, dropping the confirmatory diagnosis requirement and using a broader HCV diagnosis list (070.41, 070.44, 070.51, 070.54, 070.74). **RESULTS:** Psychiatric comorbidities measured in the sample (n=5,083) were alcohol abuse (16.6%), anxiety (20.3%), mood disorders (38.0%), schizophrenia (8.0%), and substance abuse (21.1%). Overall, 13.8% were treated with conventional or pegylated INF-a, most along with ribavirin. Protease inhibitor utilization (approved for HCV in 2011) was <1%. Alcohol abuse was associated with lower INF-a treatment rates (9.5% vs. 14.6%, p<0.001). Anxiety (15.9% vs. 13.2%, p<0.025) and mood disorder (15.1% vs. 13.0%, p<0.038) patients had higher rates, compared to patients without these comorbidities. Alcohol abuse and anxiety trends were similar after dropping the confirmatory diagnosis requirement (n=10,335), but mood disorder was no longer significant. Using the broadest psychiatric diagnosis categories combined, rates associated with increased INF-a treatment rates, contrary to expectations. Minor sample selection changed impacts results, suggesting a need to carefully consider inclusion/exclusion criteria.

**PIN97**

**COMBINED RISK AND CORRELATES OF PNEUMOCOCCAL VACCINATION AMONG LATENT CLASSES OF OLDER ADULTS IN THE CROSS-SECTIONAL NATIONAL HEALTH AND WELLNESS SURVEY IN BRAZIL**

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**OBJECTIVES:** To estimate predictors of pneumococcal polysaccharide vaccine (PPV) use across latent classes of older Brazilian adults, to understand characteristics associated with use in subpopulations with varying characteristics. **METHODS:** Data from the patient-reported, Internet-based 2011 National Health and Wellness Survey in Brazil (n=12,000 adults) were used. Mixture modeling was applied to identify latent classes among respondents aged ≥50 based on sociodemographics, health attitudes and behaviors, and health care resource use. Logistic regressions predicted PPV use (ever vs. never) within each class. Covariates included moderate-risk diabetes (impaired glucose intolerance, immunocompetent), high risk status (immunocompromised), flu vaccination in past year, and parent/caregiver of a child receiving pneumococcal vaccination. **RESULTS:** Among 3,195 respondents ≥50, two latent classes emerged. Class 1 (assumed n=1,981) versus 2 (n=1,214) respondents had higher adjusted odds of being educated beyond high school (OR=26.75), partnered (OR=2.29), insured (OR=2.08), male (OR=1.80), exercising (OR=1.09), overweight/obese (OR≥1.18), and low income (41.4–47.1), and MMR in 71.2% (68.9–73.4). Higher socioeconomic status, time living in the municipality, mother’s years of school completed, and affiliation to social security were associated with better vaccine coverage (p<0.003); children of internally displaced families, children pertaining to a minority, and those coming from families with greater number of siblings had lower coverage.

**CONCLUSIONS:** Vaccination coverage in children ≤5 months meets WHO goal of 90%, or is very close to it, though coverage in older children falls below that goal. Delayed immunization is a common problem in Colombia, which may result in reduced protection. There are few modifiable factors associated with low coverage, though the identification of vulnerable populations may help to improve the reach of immunization programs.

**PIN98**

**DISPARITIES IN INITIATION OF HAART AND IN VIROLOGIC SUPPRESSION AMONG PATIENTS IN THE HIV OUTPATIENT STUDY (HOPS), 2000-2010**

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**OBJECTIVES:** Improving and reducing disparities in time to HAART initiation and virologic suppression (VS) can assist in reducing U.S. human immunodeficiency virus (HIV) incidence. **METHODS:** Using data from ARV-naïve patients who entered HOPS in 2000–2010, we compared 862 HAART initiators with 556 non initiators, and assessed temporal trends and correlates of initiating HAART and achieving VS (<500 copies/ml) using Kaplan-Meier curves and Cox proportional hazards models. **RESULTS:** Among 1,112 patients included in our analysis, patients were less likely to start HAART and achieve VS <1 year of diagnosis if they were