treatment effectiveness, recurrence rates, mortality rates, and costs. **RESULTS:** In the general populatio n, 5%–20% of adults infected are estimated to be asymptomatic carriers of CDI but up to 80% of the elderly in LTCF are colonized. Over 50% of cases are associated with hospitals and LTCFs. Growing number of cases have onset in the community. 9% of patients over 65 experience severe episodes compared to 4% for those below 65. Mortality rates for elderly are much higher. Patients over 65 experience almost twice the recurrence rate (38%), compared with younger populations (18%–22%). The rates for a second recurrence are 38% for those 65+ versus 24% below 65. Mortality increases with the number of recurrent CDI episodes experienced. Recurrences were associated with major increases in hospital LOS and in costs. **CONCLUSIONS:** Our age-specific model allows to project and to quantify the impact of a CDI outbreak in terms of clinical burden and costs. Using a scenario-based approach, we compared current treatment with the novel approach of duodenal infusion (fecal transplant) are carried out.

**PIN91**

**TWO-DOSE INFLUENZA VACCINATION COVERAGE AMONG UNITED STATES CHILDREN, 2008-2011**

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**BACKGROUND:** Children 6 months through 18 years of age are consistently identified as a high-risk population for influenza infections. Since 2007, the Advisory Committee on Immunization Practices (ACIP) emphasized children aged 6 months to <9 years receive two doses of influenza vaccine in a season. Poor compliance with this two-dose regimen has been described in recent years. However, since ACIP’s two-dose recommendation in 2007, public health data on influenza-compliance have not been assessed using population-based data. **OBJECTIVES:** This study analyzed data from influenza seasons 2008-2011 to examine two-dose compliance for children aged 19-35 months. This analysis tests for significant demographic and socioeconomic differences in one- and two-dose influenza vaccinations. **METHODS:** Seasonal influenza vaccinations of children were estimated from the National Immunization Survey (NIS). The analysis results were nationally representative by weighting the study population according to known NIS factors (i.e., age, race, gender) on influenza vaccination. Results: For all four seasons, adjusted one-dose influenza vaccination was significantly lower among children 24-35 months compared to children 19-23 months (range from 7.8-44.5%, p<0.05). Furthermore, one- and two-dose influenza vaccination was lowest among children living below the poverty level compared to children living above the poverty level (range from 9.4-53.7%, p<0.05). **CONCLUSIONS:** Policies to improve one- and two-dose influenza vaccination rates should target children living below the poverty level. Future research should be conducted to improve one-dose vaccination rates among older infant children should continue. Further studies are needed to determine the reasons for initiating influenza vaccinations among children less than 24 months of age.

**PIN92**

**UNWARRANTED USE OF BROAD-SPECTRUM ANTIBIOTICS**

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**OBJECTIVES:** This study aimed to evaluate if high antibiotic consumption is explained by inappropriate prescribing, given current practice guidelines. This is assessed through measuring the proportion of Upper Respiratory Tract Infections (URTIs) treated by GPs with Co-amoxiclav, and Urinary Tract Infection (UTI) treated with fluoroquinolones, comparing across population subgroups for differential treatment patterns. **RESULTS:** The study included data from all Chalfont 77 GPs and 400 physicians from 4300 clinical practices during 2011. Rule-based algorithms were used to classify multiple primary care visits into discrete UR TIs and UTI events and link these with AB prescriptions and dispensing. Infectious events and antibiotic prescription rates were calculated. Differences in distributions across districts and population subgroups were then tested with Chi-square analysis; for prescribing ratios for UTI the ratio for prescribing fluoroquinolones vs. Nitrofurantoin (narrow-range AB of choice) were calculated. **RESULTS:** 6.5 million visits for infectious diagnoses were registered for all 4 million enrollees. Almost 75% of the Co-amoxiclav dispensed was used for treatment of UTI, with 6% of UR TIs treated with Co-amoxiclav. Over 75% of fluoroquinolones dispensed were used to treat UTI, with 23% of UR TIs treated with fluoroquinolones. Variability between districts in the use of Co-amoxiclav for UR TIs ranged between 12%-23% in adults and 5%-21% in children. Twenty percent of physicians were co-amoxiclav “prescribers” with high rates of UR TIs treated with co-amoxiclav (10%-38%), 16% of adults and 20% of children. Treatment of UR TIs with quinolones varied considerably between 19%-52%. The proportion of Quinolones/Nitrofurantoin prescribed ranged between 1.4 (1.3-1.5) to 6.2 (5.5-6.8) in each district. **CONCLUSIONS:** Rates of utilizing broad-spectrum antibiotics in the community are higher than expected and show wide variability across country districts and between physicians This suggests the need for introducing this as a quality measure and implementing targeted interventions to reduce inappropriate antibiotic use.

**PIN94**

**EVALUATION OF INJECTABLE FOSFOYMICIN USE IN A MEDICAL CENTER**

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**OBJECTIVES:** To evaluate efficacy, safety (concerning hypernatremia), and usage of UF0B in a medical center **METHODS:** A retrospective medical record review was conducted for patients who was treated with UF0B in Wan-fang hospital during 2012/5/1 to 7/8. Patients with cancers were excluded. Patients with suspected or diagnosed infections and more than one dose of UF0B were included. For hypernatremia analysis, only 1% of adult patients with serum sodium level and no hypernat remia events prior UF0 use. Microsoft excel and student t-test were utilized for analyzing data and p-values. **RESULTS:** Thirty-eight patients were included and the common infection diagnosis (N = 12); UTI (N = 12); cellulitis (N = 9) and sepsis (N = 9). The common pathogens are Staphylococci (3%) and Pseudomonas species (21%). Twenty-one percent of cases used UF0B as empirical or first-line therapy. Combination treatments with cephalosporins (26%) or penicillins (24%) were more frequent than monotherapy (77%). Most patients developed hypernatremia (serum sodium level >145 mEq/L) after using UF0B for 4-6 days, patients with creatinine clearance above 50 ml/min did not develop hypernatremia. **CONCLUSIONS:** The serum sodium level did not develop hypernatremia (defined as an increase of 10 mEq/L) for early cohort patients who started UF0B. For patients with higher baseline serum sodium level and renal dysfunction, serum sodium level should be monitored closely while using UF0B. Using UF0B as adjunct for first line or empiric treatments is lack of evidence. Further antibiotic prescribing regulations should be implemented concerning prescribing UF0B.

**PIN95**

**ANTIMALARIAL DRUGS USE PATTERN IN RETAIL OUTLETS IN ENUGU URBAN SOUTH EAST NIGERIA; IMPLICATION FOR MALARIA TREATMENT POLICY**

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**OBJECTIVES:** Drugs retail outlets constitute a major source of malaria treatment in developing countries requiring regular and accurate information for enhancing strategies for improving the use of Artemisinin-based Combination Therapy (ACTs) and sales of party drugs in private retail outlets to assess the current state of compliance to policy. **METHODS:** A prospective cross-sectional survey of randomly selected drugs retail outlets in Enugu, South East Nigeria. Outlets were selected between August 2012 to March 2013, to determine the types, range, prices and sales pattern of antimarial drugs as well as concomitant medications, from pharmacies and patent medicine outlets. Data was collected and analysed for antimarial drugs demanded for and sold by self-medication or recommendation by retail outlets and prescriptions from hospitals. **RESULTS:** With a total of 1,321 dispensed antimarial drugs, ACTs accounted for 72.7% while monotherapy was 27.3%. ACTs drugs contributed 32.7% (n = 314) of ACTs. 46.5% (64%) of the drugs were dispensed from self-treatment by patients. Treatment by the retail outlets accounted for 35.8% (n = 473) while 17.7% of the drugs were dispensed from hospital prescriptions. The median cost of the ACTs, at $3.23 is about three times the median cost of monotherapy ($0.97). Total cost of treatment, including concomitant medications and retail outlets and prescriptions from hospitals. The median cost of the ACTs, at $6.93 in (n = 666). Self-medication accounted for the highest number of monotherapy at 82%. **CONCLUSIONS:** The use of ACTs as predominant antimarial drugs of choice has been widespread in the retail outlets, with significant contributions from AMFm drugs. This portends positive implications on the implementation of antimarial drug policy. However costs of policy recommended drugs remain higher than intended and the use of monotherapy particularly through self-medication is significant suggesting measures to directly target consumers for improved use of antimarial drugs.

**PIN96**

**REAL WORLD DRUG UTILIZATION OF HIV THERAPIES IN CANADA**

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**OBJECTIVES:** To describe current utilization of HIV drugs in Canada. **METHODS:** Longitudinal pharmacy retail data were obtained from most Canadian provinces. Eligible patients received their first HIV drug prescription during the selection period, and consistently filled subsequent prescriptions at the same pharmacy. Selection periods included an early cohort (initiating therapy January 2008 to July 2009) and a late cohort (initiating therapy August 2010 to February 2012). The observation period was 43 months for the early cohort and 12 months for the late cohort. RESULTS: 905 patients in the early cohort and 1,411 patients in the late cohort were analysed. Single-tablet regimens were the initial therapy for 32% of patients (early cohort) and 33% (late cohort). The most commonly used regimen was a backbone + protease inhibitor (PI): 45% of total days on therapy (DOT) for early cohort, 39% for late. Darunavir was increasingly chosen as the initial PI (3%) patients for early cohort and 9% (late cohort). When plus integrase inhibitor (II) increased from 2% DOT (early cohort) to 11% in the late cohort. The majority of II patients were treatment-naïve (71%) in the late cohort, despite funding limitation to treatment-experienced patients in most jurisdictions. After 3 years of follow-up in the early cohort, 45% were still on their first therapy For early-cohort patients who switched to a second therapy, 33% did so within 3 months. Subsequent lines of therapy phased in more gradually in both cohorts. Darunavir and II use increased in later lines of therapy. In both cohorts, but particularly for the late cohort. **CONCLUSIONS:** This research documented changing patterns for HIV drug use in Canada, with increasing use of darunavir and II over time (premise of funding restrictions) and frequent early therapy switches suggestive of tolerability issues.

**PIN97**

**PHARMACIST VACCINATION PROGRAMS FOR COMMON INFECTIOUS DISEASES: A SYSTEMATIC REVIEW OF THE LITERATURE ON THIS EMERGING MODEL OF CARE**

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