of respondents say their biosimilar approach will likely be influenced by thought-
population (N = 25,288, 44.51% were users. The prevalence of use has increased over time; from 3.2% in 2006 to greater than 50% of its strongest users. They were older (45.03 years vs. 41.36), had higher Charlson Comorbidity Indices (0.63 vs. 0.29), filled more prescriptions per person (33.62 vs. 14.53), and used more unique medications (7.33 vs. 3.80). The majority of users were female (59.79%), employed (56.96%), had insurance (64.58%), white (76.06%), lived in urban areas (85.59%) who had prescription drug coverage (96.92%) and fell into the two highest income categories (82.38%). Increasing age was a significant predictor of LCGP use as individuals 35-54 (OR 1.15, 95% CI 1.07 – 1.23) and 55-64 (OR 1.26, 95% CI 1.16 – 1.36) were more likely to be users compared to those aged 18-34. The odds of LCGP use increased nearly 20% (OR=1.19, 95% CI 1.18 – 1.20) for each additional unique medication used during an individual’s two-year study period.

**CONCLUSIONS:** The prevalence of LCGP use in this privately insured adult population suggests a high potential for exposure misclassification in administrative claims datasets.

**PHS108**

**SOCIOECONOMIC DIFFERENTIAL IN ONE-YEAR SURVIVAL AFTER HOSPITALIZATION FOR ISCHEMIC STROKE: THE EFFECT OF ACUTE AND POST-ACTIVE CARE-PATHWAY**


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**OBJECTIVES:** To explore the role of ischemic stroke care-pathway on the association between education level and one-year survival after admission. **METHODS:** From the Lazio health data warehouse the incident hospitalizations for ischemic stroke in adults during 2011/12 were selected. For each subject the clinical history was defined by reviewing the previous hospitalizations and prescriptions. The probability of survival to acute and post-acute phases according to education level and care-pathway scenarios were estimated for a “mean severity” patient assuming for this patient the same distribution of comorbidities as observed in the cohort. One-year survival probability was calculated for the present population using mortality rates. For each scenario one-year probability ratio, university versus elementary education level and care-pathway scenarios were estimated for a “mean severity” patient.

**CONCLUSIONS:** The education level was negatively associated with mortality in acute and post-acute phases. The care-pathway reduces but does not eliminates one-year survival inequality.

**PHS109**

**GENDER DISTRIBUTION OF OUTPATIENT CARE PHYSIOTHERAPY SERVICES FOR LOW BACK PAIN IN HUNGARY**


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**OBJECTIVES:** The aim of our study is to assess the utilization of out-patient care physiotherapy services related to the Low Back Pain according to gender. **METHODS:** Data were derived from the countryside database of Hungarian National Health Insurance Fund Administration (NHIFA), based on official reports of outpatient care institutes in 2009. The total numbers of different physiotherapy services were determined by selecting the reported specific diagnoses codes and counting the number treatments provided for that specific diagnosis code. The different types of treatment codes are listed in the chapter of the Guidelines of NHIFA for ‘Physiotherapists, massage-therapists, conductors and other physiotherapy practices’. The Low Back Pain was reported according to WHO ICD diagnosis code M5450. Population distribution was taken into account on the basis of the data of the Central Statistical Office from January 1st 2009. **RESULTS:** The total number of the 151 different physiotherapy services was 433319 cases in male and 803924 cases in female. The 10 most frequent treatments accounts for 58.74% in male and 57.68% in female of total services. Frequency of the top-10 medical procedures were the following in male and female: 1) Ultrasound therapy (10.17%, 9.3%), 2) Iontophoresis (8.91%, 7.73%), 3) Passive movement (6.11%, 6.71%), 4) Mid-frequency treatment (6.73%, 6%), 5) Muscle strengthening exercises (4.38%, 6.36%), 6) Hand Massage (4.88%, 5.08%), 7) Ergo therapy (4.77%, 4.95%), 8) Spinal Mobilization 4.42%, 4; 9) Diadynamic interference management (4.98%, 4.04%), 10) Training for circulation improvement (3.38%, 3.72%). **CONCLUSIONS:** The list of the 10 most frequent types of services reflects to the demand for the combination of active and passive exercises. Frequency of the top-10 medical procedures were similar in both gender in Hungary.

**PHS110**

**REFERRAL RECOMMENDATIONS MADE BY COMMUNITY HEALTH WORKERS ON THE 6 ‘PATIENTS’ REFERRAL SLIPS. BRIDGING HOUSEHOLDS TO SUSTAINABLE HEALTHCARE; KENYAN EXPERIENCE**

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**OBJECTIVES:** Kenya’s health sector is faced with challenges of coping with demand for services and making it available to the most marginalised population. It has envisioned that one level be linked to healthcare system. The purpose of this study was to train CHWs on how to use referral tools to link households to hospitals. The CHWs indicated reasons for referral which was delivered to clinicians at the time of their first visit. **METHODS:** Quasi-experimental study was carried out in two sub-loctions in rural Kenya where one hundred CHWs were trained on community-based-referral and counter-referral model and issued with referral tools. Each was assigned at least 20 households, instructed to regularly visit them in order to identify sick persons counsel and refer them to link hospitals. One hundred villages comprising 2209 households with a population of 11,000 people were covered where the referral model was implemented. Tally sheets were used to categorize referral recommendations. **RESULTS:** The referral recommendations made by CHWs were categorized into seven themes. In total 168 recommendations were made on the referral slips, where every CHW made at least 1 to 2 recommendations. The study indicated that referral recommendations made for health check up accounted for 33% (55/168), referral to attend ANC clinic 16% (27/168), referral for TB and malaria treatment 18% (30/168), referral for US treatment 11% (19/168), referral for delivery 10% (17/168) while was 1.22 [BCI 95% 1.03-1.08] compared to whites. Women were more likely to have Medicaid or other insurance. The objective of this study is to examine the characteristics of the frequent ED users among Medicaid beneficiaries residing in West Virginia, Ohio, and Maryland. **METHODS:** A Cross-sectional study design was used. Patient-level data such as demographic factors, Medicaid eligibility, visits to primary care providers (PCP), dental visits and selected chronic conditions were obtained from the Health Resources and Services Administration’s Area Health Resources File. **RESULTS:** The study population included adults aged 18-64 years, who had at least one visit to the ED, continuously enrolled in fee-for-service, not enrolled in Medicare and alive in 2009 (n=15,779). Adults with 6 or more ED visits were defined as frequent ED users. Chi-square tests and logistic regressions were used to determine the unadjusted and adjusted associations between patient- and county-level factors and frequent ED use. **CONCLUSIONS:** In our study population, 8% were frequent ED users. A higher number of PCP visits was associated with reduction in ED use. In both unadjusted and adjusted models, significant differences in frequent ED use were observed for gender, ethnicity, chronic conditions, and PCP visits. For example, in adjusted analyses racial minority were more likely to have frequent ED use (AOR=1.48, 95%CI=1.16, 1.90) compared to whites. Women were more likely to have frequent ED use compared to men (AOR=1.19, 95%CI=1.01, 1.41). **CONCLUSIONS:** Interventions to promote visits to primary care providers may reduce the risk of frequent ED use.

**PHS112**

**HUMAN PAPILLOMAVIRUS (HPV) VACCINATION DURING WELL-CHILD VISITS IN PRIVATELY INSURED MALES 9-21 YEARS OF AGE IN THE UNITED STATES IN 2012**

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**OBJECTIVES:** Since October 2011, ACIP has recommended routine HPV vaccination for males 11-12 years of age with catch-up vaccination for males ages 13-21. Well-child visits are a key setting in which to provide HPV vaccination for this population. The objectives of this study were to estimate HPV vaccination rates among males age 9-21 years of age during well-child visits and compare HPV vaccination rates during well-child visits in 11-12 year-old males with other vaccines recommended for the same age group (Tdap and Meningococcal conjugate vaccine (MCV4)). **METHODS:** A large commercial database (MarketScan®) was used for this retrospective cohort study. The study population was males 9-21 years of age in 2012 who had well-child visits for assessment of vaccination rates of HPV, Tdap, MCV4, Hib, and Oral polio virus vaccine (OPV). **RESULTS:** In 2012, 9-21 year-old males was highest among 11-12 year-olds (56.1%) and lowest among 18-21 year-olds (20.8%). HPV vaccination rates during a well-child visit was 0.5% among males 13-18 year-olds, 10.3% among taking essential aides for 13-17 year-olds, and 13.9% among 18-21 year-olds. HPV vaccination rates in 11-12 year-old males during well-child visits (10.1%) were much lower than Tdap (32.8%, p<0.0001) and MCV4 (31.1%, p<0.0001). **CONCLUSIONS:** The Healthy People 2020 objective for HPV vaccination in males is not met. The HPV vaccination rates among study population are not optimal when comparing to other mandatory vaccines, especially among 11-12 year-old males. Well-child visits currently are missed opportunities and can play an important role to improve HPV vaccination in the US.