

the easiest gynecological cancer to prevent, the study findings reveal a significant healthcare burden of cervical cancer in the national Medicaid population. A more rigorous routine screening of cervical cancer can be incorporated in clinical care of women enrolled in Medicaid to facilitate earlier diagnosis at pre-cancerous stage.

## PHS157

## NONCOMMUNICABLE DISEASE PREVENTION AND CONTROL IN MONGOLIA: A POLICY ANALYSIS

Chimeddamba O<sup>1</sup>, Peeters A<sup>2</sup>, Walls H<sup>3</sup>, Joyce C<sup>1</sup>

<sup>1</sup>School of Public Health and Preventive Medicine, Monash University, Melbourne, VIC, Australia,

<sup>2</sup>Baker IDI Heart and Diabetes Institute, Melbourne, VIC, Australia, <sup>3</sup>London School of Hygiene and Tropical Medicine, London, UK

**OBJECTIVES:** Noncommunicable diseases (NCDs) are the major global causes of morbidity and mortality. In Mongolia, a number of health policy documents have been developed targeting the prevention and control of noncommunicable diseases. This paper aimed to evaluate the extent to which NCD-related policies introduced in Mongolia align with the World Health Organisation 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of NCDs (Action Plan). **METHODS:** We conducted a qualitative review of policy documents introduced by the Government of Mongolia from 2000 to 2013. A literature review, internet-based search, and expert consultation identified the policy documents. Information was extracted from the documents using a matrix, mapping each document against the six objectives of the Action Plan and five dimensions: data source, aim and objectives of document, coverage of conditions, coverage of risk factors and implementation plan. 40 NCD-related policies were identified. **RESULTS:** Prevention and control of the common NCDs and their major risk factors as described by WHO were widely addressed as were the objectives of the Action Plan. It appears that each objective of the WHO 2008-2013 NCD Action Plan was well addressed. Many documents included explicit implementation or monitoring frameworks. Areas less well or/and not addressed were chronic respiratory disease, physical activity guidelines and dietary standards. **CONCLUSIONS:** The Mongolian Government response to the emerging burden of NCDs is a population-based public health approach which includes a national multisectoral framework and integration of NCD prevention and control policies into national health policies. Our findings suggested gaps in addressing chronic respiratory disease, physical activity guidelines, specific food policy actions restricting sales advertising of food products, and a lack of funding specifically supporting NCD research. Future research should explore the effectiveness of national NCD policies and the extent to which the policies are implemented in practice.

## PHS158

## FACTORS PREDICTING RECEIPT OF PROSTATE SPECIFIC ANTIGEN (PSA) TESTING: EVIDENCE FROM THE NATIONAL AMBULATORY MEDICAL CARE SURVEY (NAMCS) DATA

Haider MR<sup>1</sup>, Qureshi Z<sup>1</sup>, Horner R<sup>1</sup>, Bennett C<sup>2</sup>

<sup>1</sup>University of South Carolina, Columbia, SC, USA, <sup>2</sup>University of South Carolina College of Pharmacy, Columbia, SC, USA

**OBJECTIVES:** Prostate cancer (PCa) claimed the lives of approximately 29,480 men in 2014 and American Cancer Society estimates the incidence of prostate cancer in 2015 to be 220,800. Screening using the prostate specific antigen (PSA) test remains critical to the early detection and management of PCa. Our objective was to study the factors affecting PSA testing in the US for the year 2010. **METHODS:** We used the most recent National Ambulatory Medical Care Survey (NAMCS) data available which was for the year 2010. The NAMCS data is a nationally representative annual survey of the provision and utilization of outpatient medical care services in the US. Main outcome measure was undergoing the PSA test. A logistic regression model was fit to determine if any variables were associated with having the PSA test done. **RESULTS:** Our weighted study sample consisted of primarily White men (N=568,146,002) between the ages of 50-64 years (N=231,848,274) residing in urban areas (N=544,556,049) covered by private health insurance (N=328,904,965) who were not being seen by a primary care provider (N=381,639,557). Majority of the men had undergone a PSA test (N=646,376,032). Multivariate analysis reveals that 65-79 years of age (OR: 3.4), living in urban areas (OR: 1.58), being consulted for chronic problems (OR: 2.25) and preventive services (OR: 4.40), being seen by surgical specialty physicians (OR: 1.52), and had private insurance (OR: 1.40) increased the likelihood of the visit resulting in a PSA test. **CONCLUSIONS:** Contrary to expected standard of practice of primary care physician (PCP) visits influencing PSA testing, our study showed that visiting with a surgeon increased the likelihood of PSA testing. Providing patients with the opportunity to be tested as early as possible during their visit with a PCP might aid in efficiently diagnosing PCa.

## PHS159

## THE BURDEN OF GOUT IN A CANADIAN PRIMARY CARE POPULATION

Williams DM<sup>1</sup>, Cowan C<sup>1</sup>, Gendron A<sup>1</sup>, Goodfield J<sup>2</sup>, Oraichi D<sup>2</sup>, Fischer A<sup>2</sup>, Borrelli R<sup>2</sup>, Liu N<sup>2</sup>, Dziarmaga A<sup>1</sup>

<sup>1</sup>AstraZeneca Canada Inc., Mississauga, ON, Canada, <sup>2</sup>IMS Brogan, Mississauga, ON, Canada

**OBJECTIVES:** Gout, a common arthritis, causes significant burden on patient's quality of life and the health-care system. The objectives of this study were to understand a gout population in terms of demographics, clinical characteristics, healthcare utilization and costs versus a gout-free population. **METHODS:** This retrospective study is one portion of an overall gout study, which used data extracted from IMS Evidence 360 EMR Canada, a primary care electronic medical records database in Ontario. Gout patients were selected if they had  $\geq 1$  gout diagnosis and/or  $\geq 1$  gout medication claim (index date) from 1 July 2008 to 30 June 2012. Gout patients were matched 1:5 to gout-free patients based on demographics and comorbidities using an adapted version of the Charlson Comorbidity Index (CCI). All patients were followed for two years post-index date. Costs were limited to primary care physician visits. **RESULTS:** There were 676 gout patients; 77% were male with mean age of 58 years, which matched closely to gout-free patients. Mean CCI score at baseline was 1.08 in both groups. Over the two-year follow-up, gout patients were significantly

more likely to have cardiovascular disease (61% vs. 40%), dyslipidemia (43% vs. 29%), obesity (26% vs. 14%), and diabetes (22% vs. 17%, all  $p < 0.01$ ) vs the gout-free cohort. Gout patients' lab results (BMI, BP, eGFR, lipids) deviated from normal more than gout-free controls. Gout patients incurred a significantly higher number of annual physician visits (5 vs. 2.5), lab tests (24 vs. 4.5), and had a greater percentage with specialist referrals (58% vs. 46%, all  $p < 0.0001$ ) leading to higher healthcare costs. **CONCLUSIONS:** Gout is associated with high disease burden in a Canadian primary care setting, which is consistent with previous publications. Gout patients were more likely to have significant comorbidities, farther-from-normal lab results, and higher healthcare utilization and costs compared to gout-free patients.

## PHS160

## EVALUATING THE PREVALENCE OF MENINGITIS IN HAZARA DIVISION, KPK PAKISTAN

Azhar SA, Khan GN, Wazir FW, Izhar IH

COMSATS Institute of Information Technology, Abbottabad, Pakistan

**OBJECTIVES:** The main objective of this study is to evaluate the prevalence of Meningitis in Hazara Division, KPK Pakistan. **METHODS:** A retrospective approach was used to collect the data from Ayub Medical Complex Abbottabad Pakistan. Data collection was carried out from 2nd Feb to 1st May 2014, from Paediatric ward. **RESULTS:** A total of 360 patients were enrolled during the study in Ayub medical complex, Abbottabad, of which the meningitis patient were 40, occupying 11.11% of total admission in the Paeds wards. Male patient occupies the higher percentage of 61.38% and female on the lesser side occupying only 38.51%. The overall mortality rate during the study period was 12.22% from all disease and from meningitis the mortality rate was 3.88% from all the period. The mortality rate in meningitis patient was 35% during the study period. **CONCLUSIONS:** Meningitis either bacterial or viral is still a common serious infection. Both the causative (Bacterial or Viral) are common in the Hazara division of KPK. In our finding we have concluded that Meningitis prevalence is still more common and higher in Pakistan compare to other countries. Meningitis still prevail on higher side, so there is need of extensive awareness and vaccination program to cut down the prevalence rate. Meningitis Vaccination should be included in our expanded Immunization program (EPI).

## PHS161

## RECENT TRENDS IN BACTERIAL INFECTION-RELATED HOSPITALIZATIONS IN THE US

Kurosky SK, Reese ES, Candrilli S

RTI Health Solutions, Research Triangle Park, NC, USA

**OBJECTIVES:** In the US, antibiotic-resistant (ABR) pathogens infect > 2 million people and cause nearly 23,000 deaths annually. In 2013, the Centers for Disease Control and Prevention identified *Clostridium difficile* (*C. diff*), carbapenem-resistant Enterobacteriaceae (CRE), and drug-resistant *Neisseria gonorrhoeae* (*N. gonorrhoeae*) as the nation's most urgent ABR threats. To understand the trajectory of ABR infections, we examined annual *C. diff*-, CRE-, and *N. gonorrhoeae*-related hospitalization and death rates in the US. **METHODS:** Data from the 2001-2012 Healthcare Cost and Utilization Project's National Inpatient Sample (NIS), nationally representative surveys of US hospitalizations, were analyzed. Overall and age- and gender-stratified annual rates of *C. diff*-, CRE-, and *N. gonorrhoeae*-related hospitalizations (per 10,000 people) and deaths per 10,000 hospitalizations were calculated. **RESULTS:** *C. diff*-related hospitalizations increased gradually from 5.2 in 2001 to 11.9 in 2012. CRE-related hospitalizations more than doubled between 2010 (5.6) and 2012 (11.9). *N. gonorrhoeae*-related hospitalizations remained fairly constant (0.2 in 2001 to 0.1 in 2012). *C. diff*-related hospitalizations among persons aged 85+ increased substantially, from 55.7 in 2001 to a high of 113.3 in 2008. CRE-related hospitalizations were also highest for the 85+ age group. Females had substantially higher rates than males for all three pathogens over time. Death rates steadily increased for each pathogen during the study period. **CONCLUSIONS:** *C. diff*- and CRE-related hospitalization rates have increased substantially over the past decade, while *N. gonorrhoeae*-related hospitalization rates remained constant. Both *C. diff* and CRE are commonly spread in healthcare settings; therefore, rising hospitalization rates with these infections is unsurprising. The recent surge in CRE-related hospitalizations is consistent with other studies that suggest increased use of carbapenems is partly responsible for increasing rates. These findings indicate need for immediate attention to developing interventions to curb the growth of *C. diff* and CRE infections to reduce the burden on the patient population and healthcare system.

## PHS162

## PREVALENCE OF MENTAL HEALTH DISORDERS AND ACCESS TO CARE AMONG CHILDREN ENROLLED IN THE MISSISSIPPI MEDICAID

Nunna S<sup>1</sup>, Shah R<sup>1</sup>, Banahan III B<sup>1</sup>, Hardwick SP<sup>2</sup>, Clark JP<sup>2</sup>

<sup>1</sup>University of Mississippi, University, MS, USA, <sup>2</sup>Mississippi Division of Medicaid, Jackson, MS, USA

**OBJECTIVES:** The aim of the present study is to evaluate the prevalence of several mental health diagnoses and utilization of anti-psychotic medications among the children (<18 years) enrolled in the Mississippi Medicaid. **METHODS:** A retrospective analysis was conducted using Mississippi Medicaid administrative claims data for the period July 2013 to June 2014. Beneficiaries were included if enrolled in Medicaid (fee-for-service or coordinated care), were less than 18 years of age at end of observation year and enrolled 3+ months during the observation year. Since most mental health diagnoses are of a chronic nature, diagnosis were assessed using claims for the period January 2012 to June 2014 in order to be as complete as possible. Treatments and costs estimates were based on the one year observation period. Access to care was measured as the proportion of care received from MDs in-county, in adjacent counties, and in other counties. All measures were computed for each county. **RESULTS:** 387,838 children were identified in the observation period. Overall, the prevalence of ADHD (11.0%) was highest followed by developmental disorders (5.7%) and conduct disorder (4.4%). Children ages 11 to 18 had higher