PHS52
ECONOMIC EVALUATION OF A NEPHROPROTECTION PROGRAM IN PATIENTS OF THE MEXICAN INSTITUTE OF SOCIAL SECURITY WITH CHRONIC KIDNEY DISEASE
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OBJECTIVES: Clinical evidence shows that nephroprotection programs in patients with chronic kidney disease (CKD) and hypertension improve patient’s health, increase life expectancy and reduce hospitalizations and early deaths. In Mexico, there are few nephroprotection programs. The purpose of this study was to analyze a nephroprotection program in patients with stage 3 CKD attending the Internal Medicine Institute of Social Security (SEISS). A randomized controlled trial was performed from September 2015 to March 2018. The study was based on a decision analytic model with a time horizon of 10 years. The analysis was performed from society’s perspective. The primary outcome was the cost-effectiveness of the intervention. RESULTS: A total of 443 patients were allocated to the intervention group (EG) and 463 patients to the control group (CG). The intervention group increased their life expectancy by 3.1 years (95% CI: 2.8 to 3.4) and reduced hospitalization times by 4.0 days (95% CI: 3.2 to 4.9) compared to the control group. The incremental cost-effectiveness ratio of the intervention was $9594/QLY. CONCLUSIONS: The intervention is cost-effective and should be implemented in high-burden settings to reduce hospitalization and early deaths in Mexico.

PHS53
COST AND EFFECTIVENESS OF AN EYE CARE ADHERENCE PROGRAM FOR SCHOOL CHILDREN WITH SIGNIFICANT VISUAL IMPAIRMENT
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OBJECTIVES: The focus of this study was on children with visual problems, specifically children who had not been tested for vision (≤ 10%) or who had not followed-up ophthalmic care in 2012-13. 71 patients were reached and completed a follow-up (59.2%). 49 patients were reached but did not follow-up (40.8%). SW time was >3hrs/patient for those who followed up and >2hrs/patient for those that did not. Based on the CECP program cost total ($14,249) and the reimbursement payment ($6,265.66), the net cost of the CECP program was $7,983.59. Predisposing factors (lack of awareness, level of perceived importance, conflict of commitment, lack of means of communication) was the main barrier to care for patients that did not follow up. CONCLUSIONS: CECP significantly improved adherence to eye care but comes at an additional cost. Future efforts should focus on reducing operational efficiencies (e.g., capping the eye examination by optometrists) and if the incidence of vision loss in increased.

PHS54
COST-EFFECTIVENESS OF A CARE PROGRAM FOR HIV/AIDS PATIENTS INSURED BY A HEALTH MAINTENANCE ORGANIZATION IN COLOMBIA COMPARING THREE HEALTH PROVIDERS NATIONWIDE
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OBJECTIVES: HIV/AIDS prevalence in Colombia is 0.8%. Currently for the country orphans are affected and impact the health of its population. A health maintenance organization (HMO) with national coverage aims to contribute by assessing the health outcomes of its care program for HIV/AIDS patients, a high cost disease with great impact on HRQOL. To evaluate the cost-effectiveness of the care program for HIV/AIDS patients insured by a HMO in Colombia, comparing its results in three health care providers (HCP). METHODS: A Markov model in MS Excel® was built to represent the natural history of HIV/AIDS based on the Global Burden of Disease 2010 and WHO according to the CD4 lymphocyte level. Direct costs were included, according to the information available on HMO’s databases. The outcome measure were QALY’s taken from the literature. Transition probabilities were calculated from tracking a cohort of 844 HIV/AIDS patients over 18 years old, from three health providers [HCP A, B and C] in 7 cities across the country, during 2011 and 2012. Time horizon was lifetime. Perspective was third payer. Deterministic and probabilistic sensitivity analysis were performed. RESULTS: HCP C was the most cost-effective. HCP A was US$40 and HCP B US$63.764 per QALY. Annual cost per capita by stage was: stage 1 US$202.347, US$2.281 stage 2, stage 3 US$33.022, US$104.3 stage 4 and US$6.994 for stage 5. CONCLUSIONS: Given a willingness to pay 1 GDP per capita for the country, the HCP C is the most cost-effective. The benefits of using CECP tests for antenatal syphilis screening is highly dependent on the accuracy of MRI and Mammography. There remains some statistical uncertainty around this result.

PHS55
COST-EFFECTIVENESS OF BREAST MRI AND MAMMOGRAPHY FOR SCREENING HIGH RISK POPULATION
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OBJECTIVES: Breast magnetic resonance imaging (MRI) is a sensitive method of breast screening and is increasingly being used for detection of breast cancer among high risk women. Cost-effectiveness analyses have shown that while mammograms are cost effective, breast MRI is cost prohibitive. The objective of this study was to determine if breast MRI is a cost-effective approach for the detection of breast cancer among young women at low risk. METHODS: All the costs were updated using 2018 inflation. The annual breast cancer screening with either breast MRI or mammography among young women who have more than 15% lifetime risk of breast cancer. Data from published studies provided probabilities for the model inputs. All costs and benefits were discounted at 3%. The analysis was performed from a societal perspective, comparing breast MRI with mammography. RESULTS: Breast MRI provided 19.38 discounted quality-adjusted life-years (QALYs) at a discounted cost of $37,765 while mammography provided 19.14 QALYs at a cost of $23,226 over 30 years of screening. The incremental cost-effectiveness ratio of breast MRI compared to mammography was $9594/QLY. In one-way sensitivity analysis and net benefits sensitivity analysis, the cost-effectiveness of breast MRI screening depends critically on the accuracy of both MRI and mammography. CONCLUSIONS: Annual MRI screening of women who have more than 15% lifetime risk of breast cancer was found to be potentially cost-effective, with an ICER of $9594/QLY when compared to annual mammography alone. The benefits of early detection of breast cancer with MRI in this population may outweigh the added cost of screening and the higher rate of false positives. However, the cost-effectiveness of MRI screening is highly dependent on the accuracy of MRI and Mammography. There remains some statistical uncertainty around this result.

PHS56
THE COST-EFFECTIVENESS OF ANTENATAL SYPHILIS SCREENING USING POINT-OF-CARE TESTING IN LOW AND MIDDLE INCOME COUNTRIES IN ASIA
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OBJECTIVES: Untreated syphilis in pregnancy is associated with adverse clinical outcomes to the infant. In low and middle income countries in Asia, roughly one out of three women is not tested for syphilis during pregnancy. The objective of this study was to measure CECPA’s effectiveness and cost. We also sought to identify barriers to care through a conceptual framework and geomapping software. METHODS: CECPA included SW review of records to identify children needing follow-up, SW phoned families to identify and resolve barriers to eye care and scheduled appointment. Effectiveness was defined as the percent completing ≥1 follow-up visit within the physician-recommended time frame. Cost was measured using SW time logs (converted to costs using SW wage rates + benefits) and additional materials (forms, postage, phone charges). Barriers were organized into a conceptual framework depicting 3 main themes (predisposing factors, system factors, and ability to pay) and mapping software to visually illustrate follow-up rate. RESULTS: Of 1270 children, 120 required follow-up ophthalmic care in 2012. 13. 71 patients were reached and completed a follow-up (59.2%). 49 patients were reached but did not follow-up (40.8%). SW time was >3hrs/patient for those who followed up and >2hrs/patient for those that did not. Based on the CECP program total cost ($14,249) and the reimbursement payment ($6,265.66), the net cost of the CECP program was $7,983.59. Predisposing factors (lack of awareness, level of perceived importance, conflict of commitment, lack of means of communication) was the main barrier to care for patients that did not follow up. CONCLUSIONS: CECPA significantly improved adherence to eye care but comes at an additional cost. Future efforts should focus on reducing operational efficiencies (e.g., capping the eye examination by optometrists) and if the incidence of vision loss in increased.