PHSS5 ECONOMIC EVALUATION OF A NephroPROTECTION PROGRAM IN PATIENTS OF THE MEXICAN INSTITUTE OF SOCIAL SECURITY WITH CHRONIC KIDNEY DISEASE

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OBJECTIVES: Clinic evidence shows that nephroprotection programs in patients with end-stage renal disease (ESRD) may improve patient’s health, 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 of the Children’s Eye Care Adherence Program (CECAP) for Philadelphia school children, a social worker (SW) intervention to address barriers to care among children with significant vision problems and the ease aimed to improve life expectancy and to reduce hospitalizations and early deaths.

METHODS: The study design was a cost-effectiveness analysis from the government perspective. All the costs were calculated using the 2011 U.S. dollar. We used the Department of Social Security patient register of children with vision problems that groups Mexican Institute of Social Security publishes. Costs were expressed in 2013 constant USD. A Markov model with forty eight monthly cycles was used. We considered five chronic kidney disease stages according to US National Kidney Foundation and the Mexican Institute of Social Security. The analysis was performed from societal perspective. The results were reported in 2013 U.S. dollars. One-way and net benefits sensitivity analysis addressed uncertainty in model parameters.

RESULTS: The difference in life years between SW and controls was 0.34 years. The difference in costs between SW and controls was $4,984. Deterministic and probabilistic sensitivity analysis were performed. The results showed that the SW intervention was cost-effective compared to controls.

CONCLUSIONS: The use of ICS tests for antenatal syphilis screening is highly cost-effective in low and middle income countries. Universal screening may reduce the annual number of stillbirths by up to 10,000, and the lifetime number of stillbirths by up to 500,000. Antenatal screening with either breast MRI or mammography among young women who are at high risk.

PHSS5 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. However, the specificity of breast MRI in high-risk women is low and costs are quite high. The purpose of this study was to determine if breast MRI is a cost-effective approach for the detection of breast cancer among young women at high-risk.

METHODS: All the costs were calculated using the 2011 U.S. dollar. We used the Department of Social Security patient register of children with vision problems that groups Mexican Institute of Social Security publishes. Costs were expressed in 2013 constant USD. A Markov model with forty eight monthly cycles was used. We considered five chronic kidney disease stages according to US National Kidney Foundation and the Mexican Institute of Social Security. The analysis was performed from societal perspective. The results were reported in 2013 U.S. dollars. One-way and net benefits sensitivity analysis addressed uncertainty in model parameters.

RESULTS: Breast MRI provided 19.38 discounted quality-adjusted life-years (QALYs) at a discounted cost of $37,756 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 $59547/QALY. In one-way sensitivity analysis and net and net benefits sensitivity analysis, the cost-effectiveness of MRI was net benefit positive. The cost-effectiveness of 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 $59547/QALY 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 risk 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.

PHSS5 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 GCEAP’s effectiveness and impact of its practices on 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 progression and the effectiveness of different interventions. The outcome measure were QALYs taken from the literature. Transition probabilities were calculated from tracking a cohort of 884 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.

RESULTS: In one-way and net benefits sensitivity analysis, the results showed that the use of ICS tests for antenatal syphilis screening is highly cost-effective in low and middle income countries. Antenatal screening should either expand or maintain full access to syphilis screening using the ICS test.

PHSS7 ECONOMIC EVALUATION OF A COMPREHENSIVE CARE AT HOME PROGRAM IN PATIENTS OF THE MEXICAN INSTITUTE OF SOCIAL SECURITY WITH MULTIPLE SCLEROSIS

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OBJECTIVES: HIV/AIDS prevalence in Colombia is 0.8%. Currently for the country in order to assess the economic analysis and impact of its practices on the health of its population. A health maintenance organization (HMO) with national coverage aims to assess 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).

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