PHS58  COST-EFFECTIVENESS ANALYSIS OF A HOSPITAL CARE AT HOME PROGRAM Versus INPATIENT HOSPITAL CARE IN PATIENTS OF THE MEXICAN INSTITUTE OF SOCIAL SECURITY IN MEXICO CITY

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OBJECTIVES: Hospital care at home programs could improve patient’s health and quality of life through increasing treatment adherence, therefore it could be considered for implementation beyond the Mexican Institute of Social Security.

PHS59  COST-EFFECTIVENESS ANALYSIS OF INSULIN GLARGINE (LANTUS) INITIATION BY PHARMACISTS IN A CANADIAN SETTING: THE IXING STUDY

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OBJECTIVES: Type 2 diabetes is a progressive disease with 50% loss in insulin-producing capacity at time of diagnosis, with an average 5% annual thereafter. Therefore, many patients with type 2 diabetes (T2DM) require insulin treatment. Pharmacists are frontline health care professionals who see patients with T2DM frequently and as such they could help them achieve their targets by intervening in a timely manner. The RoING study assessed the effect of a community pharmacist intervention in uncontrolled patients with T2DM treated with oral hypoglycemic agents. Those patients were prescribed insulin glargine and followed up for 26 weeks by their pharmacist. At endpoint, the average A1C reduction was 1.8% (95CI 1.4 to 2). The objective was to assess the cost-effectiveness of having pharmacists’ intervention in prescribing insulin. METHODS: The IMS CIOE Diabetes Model, a Markov model, was used to simulate clinical outcomes of oral and injectable diabetes therapies. The model was parameterized using a database of patients with T2DM managed by community pharmacists. RESULTS: The discounting lifetime costs for No-ART in Mbagathi and Moi were, KSh169,123 ($2,260) and KSh184,415 ($2,464) respectively, while life-years gained for both hospitals was 2.68 years. The undiscounted lifetime costs for the ART group in Mbagathi and Moi were, KSh377,029 ($5,005) and KSh389,071 ($5,015) respectively. The gain of 0.086 QALYs was lower than the cost of KSh259,075 ($3,405) while the cost per QALY was lower than the cutoff of 150,000 KSh ($2,000).

PHS60  COST-EFFECTIVENESS ANALYSIS OF MASS SCREENING PROGRAM FOR TYPE 2 DIABETES MELLITUS IN SOUTH KOREA

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OBJECTIVES: In spite of the national screening program, evidence is lacking on the health benefits such as decrease in complications and cost of screening of diabetes. Little is known about cost-effectiveness of national diabetes screening program. The purpose of this study is to evaluate cost-effectiveness of the current national screening program of type 2 diabetes in South Korea. METHODS: A Markov model for type 2 diabetes that reflected current national screening program was developed. This model was used to project the lifetime health benefits with first and second FPG (fasting plasma glucose) tests. Data sources for the model parameters included the National Health and Nutrition Examination Survey data for cohort characteristics, the National Health Insurance claims data (HIRA-NPS) for costs, and published literature for other epidemiology data, treatment effects and utility pertaining to diabetes patients. From a payer’s perspective, cost per life-year gained (LYG) and cost per quality-adjusted life-year (QALY) gained from screening compared with no screening were calculated based on lifetime costs and accumulated LYGs and QALYs. One-way sensitivity analyses were carried out. RESULTS: The incremental cost-effectiveness ratio (ICER) was higher than 84 million KRW per LYG and higher than 94 million KRW per QALY. The superiority strategy in screening interval was calculated as every two years. The results of sensitivity analyses showed that older age, higher participation rates of second FPG test, and higher rates of glucose control could improve cost-effectiveness of diabetes screening. CONCLUSIONS: The current national diabetes screening program was not cost-effective considering GDP per capita or willingness-to-pay per QALY. Policies to improve participation rates in second screening test need to be established since higher second screening rate results in more impacts on reducing life expectancy in a range of 6 to 12 months depending on the medicine we were analyzing. ICER is cost-effective for death avoided (ICER = $15,223). Hospital supply extension is 1,620 beds per year. Budget impact analysis was conducted.

PHS61  COST-EFFECTIVENESS OF EARLY DETECTION OF ENDOMETRIOSIS: A SYSTEMATIC REVIEW

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OBJECTIVES: Endometriosis is a gynecological disease that affects the quality of life of women of reproductive age and is costly to treat. The purpose of the review was to determine the cost-effectiveness of early detection strategies and determine the cost-effectiveness of endometriosis treatment. METHODS: We systematically reviewed studies published from 1996 to 2012. We evaluated two interventions (medical & surgical) of endometriosis with two outcomes (reduced costs & increased success/ reduced recurrence time). We compared the outcomes of early (minimal & mild) and late (moderate & severe) stage interventions of endometriosis by summarizing the studies and listing their relative main outcomes. We also assessed the quality of the studies by checking (yes or no) whether they conducted a sensitivity analysis. RESULTS: Seven studies met the inclusion criteria of enrolling patients suffering from endometriosis and reporting costs and effects relating to detection and treatment of endometriosis, and early and late stage of endometriosis. Early stage interventions were less costly and more effective but only two studies conducted a sensitivity analysis. CONCLUSIONS: The findings indicate that early detection of endometriosis is more cost-effective than late detection of the disease. Due to a lack of high-quality evidence, there are limitations to these findings. The methodological structure of the studies was not conformed to analytical robustness and therefore affected the quality of results and outcomes reported. This validates the World Endometriosis Research Foundation’s recommendation for more high-quality studies on the economic evaluation of endometriosis.

PHS62  COST EFFECTIVENESS ANALYSIS OF HIV AND AIDS TREATMENT IN KENYA: A COMPARATIVE STUDY OF MBAGATHI DISTRICT AND MOI TEACHING AND REFERRAL HOSPITALS

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OBJECTIVES: HIV and AIDS is a major cause of premature death and impose a large disease burden in Kenya. Antiretroviral treatment (ART) is one of the interventions being implemented to mitigate these impacts. Economic studies on the cost and health effects of ART are very scarce in developing countries, Kenya included. The objectives of this research were to estimate health care utilization, the unit costs of services and the cost per patient year (LYP) gained of HIV treatment interventions from a provider’s perspective. METHODS: A retrospective study of adults on ART and those not on ART, had CDA counts 250 and below at enrolment. Data was collected from 2001 to 2012 using the HIV/AIDS Treatment and Referral Hospital (MoI) in Kenya (n=400). A micro-costing method was used to cost all the treatment inputs and Markov modelling estimated the cost-effectiveness analysis, the incremental cost-effectiveness ratio (ICER) for Table 1. ART and late stage of endometriosis treatment. RESULTS: The undiscounted lifetime costs for No-ART in Mbagathi and Moi were, KSh169,123 ($2,260) and KSh184,415 ($2,464) respectively, while life-years gained for both hospitals was 2.68 years. The undiscounted lifetime costs for the ART group in Mbagathi and Moi were, KSh377,029 ($5,005) and KSh389,071 ($5,015) respectively. The gain of 0.086 QALYs was lower than the cost of KSh259,075 ($3,405) while the cost per QALY was lower than the cutoff of 150,000 KSh ($2,000).

PHS63  COST-EFFECTIVENESS ANALYSIS OF INSULIN GLARGINE (LANTUS) INITIATION BY PHARMACISTS IN A CANADIAN SETTING: THE IXING STUDY

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OBJECTIVES: Type 2 diabetes is a progressive disease with 50% loss in insulin-producing capacity at time of diagnosis, with an average 5% annual thereafter. Therefore, many patients with type 2 diabetes (T2DM) require insulin treatment. Pharmacists are frontline health care professionals who see patients with T2DM frequently and as such they could help them achieve their targets by intervening in a timely manner. The RoING study assessed the effect of a community pharmacist intervention in uncontrolled patients with T2DM treated with oral hypoglycemic agents. Those patients were prescribed insulin glargine and followed up for 26 weeks by their pharmacist. At endpoint, the average A1C reduction was 1.8% (95CI 1.4 to 2). The objective was to assess the cost-effectiveness of having pharmacists’ intervention in prescribing insulin. METHODS: The IMS CIOE Diabetes Model, a Markov model, was used to simulate the clinical outcomes of oral and injectable diabetes therapies. The model was parameterized using a database of patients with T2DM managed by community pharmacists. RESULTS: The discounting lifetime costs for No-ART in Mbagathi and Moi were, KSh169,123 ($2,260) and KSh184,415 ($2,464) respectively, while life-years gained for both hospitals was 2.68 years. The undiscounted lifetime costs for the ART group in Mbagathi and Moi were, KSh377,029 ($5,005) and KSh389,071 ($5,015) respectively. The gain of 0.086 QALYs was lower than the cost of KSh259,075 ($3,405) while the cost per QALY was lower than the cutoff of 150,000 KSh ($2,000).