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OBJECTIVES: Annual trivalent influenza vaccines (TIV) containing three influenza strains (A/H1N1, A/H3N2, and one B) have been recommended in Panama since 2006. However, worldwide co-circulation of two distinct B lineages (Victoria and Yamagata) and difficulties in predicting which lineage will predominate in the next season have led to the development of quadrivalent influenza vaccines (QIV) including both B lineages. Our analysis evaluates the public health and economic benefits of using QIV versus TIV in Panama from 2006 to 2013. **METHODS:** A static model published by Reed et al. in 2012 was adapted to Panama and stratified by age group. In addition, B-lineage cross-protection was included based on published sources. We calculated the hypothetical impact of QIV compared with TIV over seven influenza seasons (2009 pandemic year excluded) using virologic circulation, vaccine coverage, vaccine effectiveness and attack rate. In absence of B-lineage distribution in Panama, Brazilian data were considered. For influenza-related outcomes (outpatient visits, hospitalisations, deaths), two sets of inputs were used. Influenza-related costs were estimated from societal perspective in Panamanian balboas (1 per US dollar). **RESULTS:** Over the 2006–2013 period, QIV would have prevented 7,519 influenza B cases compared with TIV, averting between 2,756 and 5,564 outpatient visits, between 28 and 2,202 hospitalisations and between 6 and 930 deaths. This translates into influenza-related avoided costs of between 137 and 3,599 thousand balboas. In 2012, year with high B circulation and mismatch, QIV would have avoided 5,256 cases, 3,889 outpatient visits, 1,539 hospitalisations, 650 deaths and 2.5 million balboas of influenza-related costs in the upper bound. **CONCLUSIONS:** The wider protection offered by QIV would reduce the number of influenza infections and its related complications, leading to influenza-related costs avoided. Herd effect was not taken into account, underestimating the benefits of QIV vaccination. More robust local data are needed to better assess benefits of QIV.

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PUBLIC HEALTH AND ECONOMIC BENEFITS OF QUADRIVALENT INFLUENZA VACCINE IN COLOMBIA

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OBJECTIVES: Annual trivalent influenza vaccines (TIV) containing three influenza strains (A/H1N1, A/H3N2, and one B) have been recommended in Colombia since 2007. However, worldwide co-circulation of two distinct B lineages (Victoria and Yamagata) and difficulties in predicting which lineage will predominate in the next season have led to the development of quadrivalent influenza vaccines (QIV) including both B lineages. Our analysis evaluates the public health and economic benefits of using QIV versus TIV in Colombia from 2007 to 2014. **METHODS:** A static model published by Reed et al. in 2012 was adapted to Colombia and stratified by age group. In addition, B-lineage cross-protection was included based on published sources. We calculated the hypothetical impact of QIV compared with TIV over seven influenza seasons (2009 pandemic year excluded) using virologic circulation, vaccine coverage, vaccine effectiveness and attack rate. In absence of B-lineage distribution in Colombia for 2007–2013, Brazilian data were considered. For influenza-related outcomes (outpatient visits, hospitalisations, deaths), two input sets were used. Influenza-related costs were estimated from societal perspective in Colombian pesos (0.00052 per US dollar in 2013). **RESULTS:** Over the 2007–2014 period, QIV would have prevented 27,957 influenza B cases compared with TIV, averting between 10,450 and 19,188 outpatient visits, between 492–7,549 hospitalisations and between 31–2,028 deaths. This translates into influenza-related avoided costs of between 1.7 and 12.5 billion pesos. In 2014, year with high B circulation and mismatch, QIV would have avoided 14,771 cases, 10,138 outpatient visits, 3,989 hospitalisations, 1,071 deaths and 6.6 billion pesos of influenza-related costs in the upper bound. **CONCLUSIONS:** The wider protection offered by QIV would reduce the number of influenza infections and its related complications, leading to influenza-related costs avoided. Herd effect was not taken into account, underestimating the benefits of QIV vaccination. More robust local data are needed to better assess benefits of QIV.

INFECTION – Patient-Reported Outcomes & Patient Preference Studies

PIN82

ADHERENCE TO ANTIRETROVIRAL THERAPY AMONG PATIENTS LOST-TO-FOLLOW UP: A CASE OF AN HIV CLINIC IN A PRIVATE-FOR-PROFIT HEALTH FACILITY IN KAMPALA, UGANDA

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OBJECTIVES: To determine the level of adherence to ART among HIV positive patients lost-to-follow in an HIV clinic in a private-for-profit health facility in Kampala district, Uganda. **METHODS:** A cross-sectional study design was conducted in an HIV clinic in Kampala district. Medical records of 550 HIV positive attending the HIV clinic from April 2005 to April 2012 in a private-for-profit health facility were analyzed. Per ART dataset, 147 HIV positive patients were identified as being lost-to-follow up to HIV care among which 94 were accessible for interviews. Loss-to-follow up was regarded as HIV positive patients who had not attended ART clinic for a period of 4 or more months. A telephone interview was conducted using a pretested structured questionnaire in order to assess adherence to ART and factors associated with loss to follow up from the ART clinic. **RESULTS:** The level of adherence to ART was 77.7% while level of loss to follow up was 26.7%. Predictors of adherence to ART were: distance from health facility (AOR = 0.01, 95% CI = 0.00–0.35), health worker attitude (AOR = 9.43, 95% CI = 1.55 – 57.43) and patients perception of lifetime ART medication (AOR = 26.54, 95% CI = 3.33 – 211.2) **CONCLUSIONS:** About

8 in 10 HIV positive patients' lost-to-follow up adhere to ART. Interventions such as comprehensive HIV training targeting health worker attitudes and perceptions of HIV positive patients such as pre- and post HIV test counseling may further improve ART adherence.

PIN83

EXPLORING ATTITUDES AND PERCEPTIONS OF PATIENTS AND STAFF TOWARDS A FEE FOR SERVICE "AFTER HOURS" CLINIC SUPPLEMENTING FREE HIV SERVICES IN UGANDA: A QUALITATIVE STUDY

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OBJECTIVES: The scale up of HIV services and access to anti-retroviral therapy in Africa has been made possible in the last 10 years. However, it is important that more sustainable "in country" options are explored for sustainability of services. The adult HIV clinic at the Infectious Diseases Institute (IDI) in Kampala, Uganda has approximately 8000 registered patients who receive care free of charge. We are exploring the possibility that some patients are willing/able to contribute to the cost of their care. Our objective was to explore attitudes and perceptions of patients and staff towards using a fee-based "after hours" clinic (AHC) at IDI. **METHODS:** We employed a cross-sectional, qualitative design. A purposeful sample of 188 adults which included current HIV clients and IDI staff was stratified by gender and age. We conducted 14 focus group discussions and 55in-depth interviews. Thematic content analysis was conducted and Nvivo Software used to manage data. **RESULTS:** There were six key themes that emerged regarding participant perceptions of the AHC. Access to care (positive and negative), benefits and disadvantages of an AHC, key categories of health care services, recommending the service to friends, sliding scale fee-for-service, and suggestions to improve service delivery. Results suggested that some respondents were willing to pay for consultation, brand-name drugs, lab tests and other services. All were willing to recommend friends/relatives. Respondents agreed that, as a sign of social responsibility, some money could be used to help underprivileged patients. **CONCLUSIONS:** Our AHC clinic is perceived as beneficial to patients because it provides access to HIV services at convenient times. Many patients are willing to pay for this enhanced service. Promotion of quality private-public partnerships aiming to sustain quality HIV services in Uganda should be encouraged.

PIN84

HEALTH STATE UTILITIES OF RISKS ASSOCIATED WITH ANTIRETROVIRAL TREATMENT FOR HUMAN IMMUNODEFICIENCY VIRUS (HIV)

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OBJECTIVES: People with human immunodeficiency virus (HIV) have increased risk of cardiovascular disease (CVD), kidney disease, and low bone mineral density. Some antiretroviral therapies (ART) further increase the risk of these events. The purpose of this study was to estimate health state utilities associated with these risks so that the values may be used in cost-utility models. **METHODS:** Qualitative thematic analysis was conducted to examine 4,122 messages posted to the POZ/AIDSmeds Internet Community Forums from 2008 to 2014. This analysis assessed member awareness of, concerns about, and treatment changes due to bone, kidney, and heart-related side effects and risks of HIV/AIDS medications. Then, health state vignettes were drafted based on this qualitative analysis, literature review, and clinician interviews. The health states (representing HIV, plus treatment-related risks) were valued in time trade-off (TTO) interviews with general population participants in the UK (London, Edinburgh). **RESULTS:** Quantitative analysis of the Internet forums documented patient concerns about ART risks, as well as treatment decisions made because of these risks. A total of 208 participants completed utility interviews (51.4% female; mean age 44.6y). The mean (SD) utility of the basic HIV health state (describing a virologically suppressed patient treated with ART) was 0.86 (0.14). Adding a description of risk to this basic health state was associated with statistically significant disutility (i.e., utility decreases): risk of renal problems (disutility = -0.02), risk of bone problems (-0.03), and risk of myocardial infarction (-0.05). Health states including the medical conditions themselves, rather than risk, had larger disutilities (e.g., stage 4 chronic kidney disease; disutility = -0.19). **CONCLUSIONS:** The vignette-based TTO method was feasible for quantifying the utility impact of ART-related risks, demonstrating small but consistent disutilities. These disutilities may be used in cost-utility models comparing the value of treatments for patients with HIV.

PIN85

DISUTILITIES ASSOCIATED WITH CENTRAL NERVOUS SYSTEM (CNS) SIDE EFFECTS OF ANTIRETROVIRAL THERAPY (ART) IN HIV

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OBJECTIVES: The introduction of effective ART in HIV has led to substantial reductions in morbidity and mortality. However adverse events (AEs) associated with ARTs can lead to discontinuation, and worsening of health-related quality of life (HRQL). This study aimed to elicit societal disutility values for CNS side effects associated with ARTs in France. **METHODS:** Health states (HS) were developed from interviews with HIV patients (N=9) and one specialist clinician in France. HS were developed to describe a stable HIV health state (on treatment), and nine CNS side effects associated with ARTs (abnormal dreams, insomnia, anxiety and depression, suicidal thoughts, balance and coordination problems, attention difficulties, dizziness, headaches and somnolence). Draft HS were reviewed and refined in interviews with patients and clinicians (N=4 in total). The revised HS were piloted with general public to check understanding and then evaluated by 100 members of the public in France using