unvaccinated with the seasonal influenza vaccine and persons vaccinated during seasons where vaccine was considered by the CDC-reported vaccine effectiveness percentage (VE%) (1-relative risk)100% a suboptimal match for seasonal flu strain. RESULTS: Published vaccine effectiveness for a suboptimal seasonal influenza vaccination ranged from 39%-63% from flu seasons 2006-2007 through 2011-2012. This was approximately the same protection observed in the large claims database for the same year ranges. When modeled together with cost it was shown that this mismatch of vaccination to circulating virus still equated to a substantial reduction in disease when vaccinated. Validation of results still ongoing. CONCLUSIONS: The burden of disease of influenza significantly decreases even when the seasonal influenza vaccine is a suboptimal match to the prevalent circulating strain. It is recommended that all persons receive the influenza vaccination each year, whether or not the match is optimal. It has been demonstrated that a suboptimal match effectively decreases the burden of the disease.

PRM63 FEASIBILITY AND ACCEPTABILITY OF MINIMAL MODELING VALUE OF INFORMATION ANALYSES FOR REAL-TIME PRIORITIZATION DECISIONS WITHIN A LARGE CANCER CLINICAL TRIALS COOPERATIVE GROUP Background: We studied the impact of antimalarial drugs, the standard of care to date. While all 47 African countries designated as malaria-endemic, have adopted the policy, significant barriers to antimalarial drug use remain concerning its feasibility and acceptability to inform real-world prioriti-

PRM64 ALTERNATIVE METHODS FOR GENERATING ARBITRARY MARGINAL DISTRIBUTIONS AND THE IMPLICATIONS FOR SIMULATION OUTCOMES Zho Xu

OBJECTIVES: Generating multivariate random variables is essential in disease simulation applications. In this study we examine the implications of alternative approaches to generating marginal distributions and their correlation with clinical outcomes. METHODS: We adopt three alternative methods including Cholesky Decomposition (CD), CD with conditional matching, and the NORMal-To-Anything (NORTA) method to generate a hypothetical simulation sample with arbitrary marginal distribution functions. We compared CD with NORTA in terms of their ability to produce a bivariate distribution in a given bivariate normal correlation matrix. As the comparator, we also create an independent and identically distributed (iid) simulation sample. The samples are individually populated in a previously developed type 2 diabetes microsimulation model to predict the major clinical endpoints over 15 years. The endpoints include all-cause mortality, diabetes-related mortality, and major cardiovascular events. We examine the goodness of fit by total deviance, i.e., the aggregated values of the relative difference between the individual predictions with the endpoints observed in the actual data, in the overall and stratified samples. RESULTS: The results show that, the model predictions deviate from the observed data with an iid sample. Over 15 years, the model over-predicts all the numbers of endpoint events by 20%, with the total deviance of 0.73, and the over-prediction is particularly more pronounced in the poorer performance. Given its flexibility for both continuous and discrete variables, NORTA method appears to be a preferable approach.

PRM65 AN EVALUATION OF COMPETING MODELS FOR PREDICTING CV EVENT RATES FROM LDL-C LEVELS IN SECONDARY PREVENTION Connor C Health Strategy, LLC, Remond, WA, USA

OBJECTIVES: This study aims to evaluate four alternative models that each describe the relationship between LDL-C and CV event rates in secondary prevention. A secondary aim of this analysis is to promote an approach to develop more reliable disease simulation models. METHODS: We evaluated the statistical performance of LDL-C and nMII+CV Death outcomes were abstracted from several landmark secondary prevent-

PRM66 THE WORLD HEALTH ORGANIZATION AND UNIVERSAL DIAGNOSTIC TESTING FOR SUSPECTED MALARIA IN CHILDREN: IS THE NEW POLICY COST-EFFECTIVE AND FEASIBLE FOR SUB-SAHARAN AFRICA? Phillips V Emory University, Atlanta, GA, USA

OBJECTIVES: Malaria is a substantial global disease burden with 198 million cases reported worldwide in 2013. It disproportionately affects sub-Saharan Africa, particularly young children and accounts for 14% of the region’s childhood deaths. In an attempt to improve disease control, the World Health Organization (WHO) in 2010 recommended countries test children (age < 5) who present with suspected malaria fever and confirm diagnosis rather than treat them presumptively with antimalarial drugs, the standard of care to date. While all 47 African countries designated as malaria-endemic, have adopted the policy, significant barriers to implementation exist. These include costs, uncertainty about the overall health benefits, shortfalls in testing supplies and physician practice patterns. METHODS: We use a decision-analytic approach to assess the policy’s cost-effectiveness in three countries in sub-Saharan Africa: Angola, Tanzania and Uganda, each representing different prevalence/incidence combinations. Our model includes country-specific epidemiologic, cost and behavioral assumptions, including that of physician and caregiver. Our model is novel in that it integrates expert opinion and evidence from each country’s National Malaria Control Program. We use a Markov speci-

PRM67 WHOLE-DRUG MODEL APPROACH: METHODOLOGIES AND CHALLENGES IN COMMUNICATING THE ECONOMIC BURDEN OF RARE DISEASES A. Proch Market Access Solutions LLC, Raritan, NJ, USA

OBJECTIVES: The concept of whole-drug model has rarely been applied in prac-

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