

and clinical outcomes. In the case of Diabetes mellitus, it helps to ensure that society allocates minimal healthcare resources wisely, fairly, and efficiently.

**Objectives** The study intended to determine the pharmacoeconomic value of the commonly used hypoglycemic agents. It aimed to find out the direct and indirect medical costs invested by patients. It sought to find out the monetary equivalent of the benefits. Finally, it also intended to identify the most economic choice of hypoglycemic agent, the net present value (NPV) and the variables sensitive to the NPV of the most-economic hypoglycemic agent.

**Methods** The study made use of cost-benefit analysis to determine the most economic agent. The average direct and indirect costs of the common hypoglycemic drugs were identified. The benefits of the treatment set are savings and cost avoidance and clinical outcomes based on avoidance of additional medications. The cost-benefit ratio was computed to determine the most-economic choice of agent. Then, the net present value was computed. Finally, to show the economic values of the treatment at different economic situations, sensitivity analysis was performed specifically univariate and multivariate analysis.

**Result** Study found out that Insulin is the most costly therapy considering the total direct and indirect cost. Consequently, Metformin with Insulin users make use of more devices/supplies. Metformin users spent most on laboratory tests and physician consultation and hospitalization. Metformin and Metformin with Gliclazide users have the highest cost of reduced productivity. Metformin users with Gliclazide save more since they have less frequent physician visits. Metformin with Insulin users incur fewer absences at work and save on hospitalization. Insulin users also save on cost-avoidance based on additional medications. The treatment with most monetary benefit is Metformin with Insulin. Based on collated data, the most economic choice of hypoglycemic treatment is Metformin with the highest cost-benefit ratio rendering the least financial loss. Sensitivity analysis of Metformin showed that it is robust in any economic scenario.

**Conclusion** Once a patient is diagnosed with DM, medical costs commence. A patient invests to obtain better health conditions through various interventions available. The amount of money invested for the treatment will change due to various economic factors. Based on the prevailing price of Metformin during the time of study, Metformin has the highest cost-benefit ratio signifying a cost-beneficial treatment. For such reasons, the utilization of the therapy with Metformin also signifies optimistic response and continuous compliance with the least financial loss.

#### REFERENCE

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#### PHARMACOECONOMIC EVALUATION OF ANTIHYPERGLYCEMIC TREATMENT UTILIZED BY PATIENTS IN BAGUIO CITY, PHILIPPINES

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**Background** The products and services delivered by today's healthcare professionals should be based on pharmacoeconomic value which is defined as a balance of economic, humanistic,