Optimal pricing of health insurance policies using credibility theory

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Abstract:

This project seeks to look at pricing of annual Health Insurance policies optimally using credibility theory. This is carried out encompassing Kenyan legislation and Actuarial Board standards on credibility theory application. It seeks to apply known credibility models on Private Health Insurance sector market data and compare the different application methods of the credibility formulas on market data. The introduction of an adjusted Credibility formula that takes into account catastrophic risk is highlighted and discussed. The analysis will then seek to find out which models best represents the experience and gives the optimal price of health insurance contract so as to ensure market penetration. It further discusses the challenges and opportunities that lie ahead