Session 9: Derivative Projections: specific population groups estimation

Healthcare Demand Forecasting: Methods and application for Brazil

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Methods of forecasting demand for health services have become increasingly frequent in the academic and government field. Largely unexplored, these forecasting methods are distinguished between those who analyze only the effect of demographic changes and those who consider demographic changes together with the dynamics of the healthcare utilization over time. In this last case, the methods adopt deterministic forecasts of the utilization rates, i.e., they assume that the average growth rates observed over a historical period will be constant over time. The aim of the presentation is to show the traditional methods in the field of healthcare services forecasting and methodological innovations in this area, as the application of stochastic forecasting methods. The specific aim of the presentation is to show the application of the Lee-Carter method - usually applied to mortality forecasting – to project admission rates in the state of Minas Gerais in Brazil.