Graphical Methods in Health Economics

Hope I. Mbachu and Ethelbert C. Nduka

Department of Statistics, University of Port Harcourt, Rivers State, Nigeria.

The economics of our Healthcare environment are dependent upon multiple factors, which include the production and consumption of income. The distribution of Healthcare expenses is being studied here to track, monitor, plan for and control spent money in the Healthcare system. On a national level, the paper presents a description of the key indicator that reflects how resources are being utilized. The distribution of expenses is compared to the increased cost. Prescription drugs appear to be disproportionately growing which is a critical component in the care of patients and can be a significant financial burden. As a result, Healthcare spending and growth rates increased higher than the inflation rate and the consumer price index. We use graphical methods to show the hypothesized relationship between Health and Medical Care. This is presented pictorially with a curve, allowing us show what is called "Flat of the Curve" Medicine. Medicare and Medicaid form two excellent examples of how economics can be used to analyze issues of the health care delivery system. On this note, an economic flow chart model is developed which shows a simplified presentation of financial flows in the health care system. As the population and hospital costs increase, reimbursements to hospitals increase. With the help of a projectile graph, we show the conservative projections based on the growth of hospital expenses and the use of hospital services by the aged, forecast a narrowing of receiptsexpenditures gap, and the projections indicate a deficit of the Health Fund. This study illustrates with data collected from Federal Medical Centre in Nigeria.