Predictive Modeling for Advanced Age Mortality

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Abstract

This paper introduces the predictive modeling tools to mortality research. The predictive modeling is applied to study how multiple risk drivers such as demographic characteristics and social and economic status impact the mortality improvement of the advanced age population. The paper provides both the theoretical frameworks and the application aspects of the predictive modeling process. As the result, a mortality risk score was derived in differentiating the mortality risk for the advanced age population. This process can also be used to derive morbidity risk scores upon data availability. The mortality risk scores developed in this study can also be used to enhance pricing and valuation of insurance products, marketing and insurance underwriting.