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Re-fitting Phase-Type Mortality Model

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Lin and Liu (2007) proposed a finite-state Markov process with one absorbing state to model human mortality. Under this model, the time of death follows a phase-type (PH) distribution. In this paper, we consider a Bayesian approach for parameter estimation under a specific PH aging model framework. Our approach enables inference of the PH distribution when the underlying aging process is given with a known structure. Comparisons are made with a maximum likelihood method.