Typically, demographers summarize the distribution of remaining lifetimes with the mean, .i.e. remaining life expectancy. There are other useful measures of longevity that refer to the pace of aging, such as the modal or median ages at death. These indicators conceal variation in lifetimes and other aspects of the age at death distribution. Variation in it expresses a fundamental inequality among individuals and addresses a growing interest in health inequality. As a result, demographers have responded to the need of accurate measures and have developed a battery of lifespan variability indicators. In this paper, we extend previous research by expressing a set of formulas to measure other aspects of the age at death distribution from lifetables conditioned on surviving to any age, such as skewness and kurtosis, from a moment generator function. Further, we explore linkages between such indicators and the pace of aging from a macro shape framework, and we interpret results in terms of the evolution of aging. We found that as populations tend to live longer, they also experience less uncertainty surrounding their eventual time of death. After 1960, there is level-off on the speed of reducing variability, as the coefficient of variation asymptotically reaches zero. Additionally, there is a shift in the value of skewness, giving the overall pattern the shape of a Prince Rupert's drop. This might be a result of countries changing from a bimodal to a unimodal distribution. Similarly, as life expectancy increases, the value of kurtosis also increases.