

Chapter 11

- 11-1. a. median = 15.4 months, restricted (to a window of 33 months) mean = 17.5 months,
- b. the 24-month employment probability = 0.3865, with a standard error of 0.0086; the monthly termination rate (hazard rate) during the first three months of employment is 0.0662 with a standard error of 0.0027; the termination rate during the 24-27 month interval is 0.0273 with a standard error of 0.0029.
- c. the 95% confidence interval for the 24-month employment probability is (0.3696, 0.4034) and the 95% confidence interval for the termination rate during the first three months is (0.0609, 0.0715).
- d. Separate analyses can be done by degree types, age groups, types of job assignments and departments.
- 11-2. a. For the group with serum creatinine concentration 2.00 - 2.49 mg/dl, the 5-year survival probability is 0.731 with a standard error of 0.050; for the group with serum creatinine concentration 2.5 mg/dl or more, the 5-year survival probability is 0.583 with a standard error of 0.058.
- b. Despite the considerable difference in the 5-year survival probabilities, the two survival distributions are not significantly different at the 0.01 level, with $X^2_{CMH} = 3.73$ and $p = 0.0535$, reflecting the small sample size.
- 11-3. a. The last reported interval must be excluded since the number of censored observations is not available for that interval.
- b. The 5-year stroke-free survival probability is 0.948 for the treatment group and 0.917 for the placebo group, suggesting that the treatment prevents strokes; $X^2_{CMH} = 11.27$ with $p = 0.0008$, indicating that the stroke-free survival distributions of the two groups differ significantly.

- 11-6. a. median for the fee-for-service group = 28.8 month; median for HMO = 29.5. The two survival distributions are not significantly different.