

Department Seminars

Cost and Cost-Effectiveness Analysis with Censored Data

Hongwei Zhao, ScD

Associate Professor

Department of Epidemiology and Biostatistics

School of Rural Public Health

Texas A&M Health Science Center



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Abstract:

Cost assessment and cost-effectiveness analysis serve as an essential part in economic evaluation of medical interventions. In clinical trials and many observational studies, cost as well as survival data are often censored. Standard techniques for survival-type data are often invalid in analyzing censored cost data, due to the induced dependent censoring problem. In this talk, we will examine a few well-known statistical methods for estimating medical cost with censored data, and note the equivalency between some estimators. The incremental Cost-Effectiveness Ratio (iCER), which is a measure on additional costs one has to pay for saving an additional year of life (or quality-adjusted life), will be considered for cost-effectiveness analysis. The methods for obtaining its confidence interval will be discussed. An example from a clinical trial comparing the effectiveness of implantable cardiac defibrillators (ICD) with conventional therapy for individuals at high risk for ventricular arrhythmia will be used to motivate and illustrate the methods.

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12:00-1:00 p.m.

