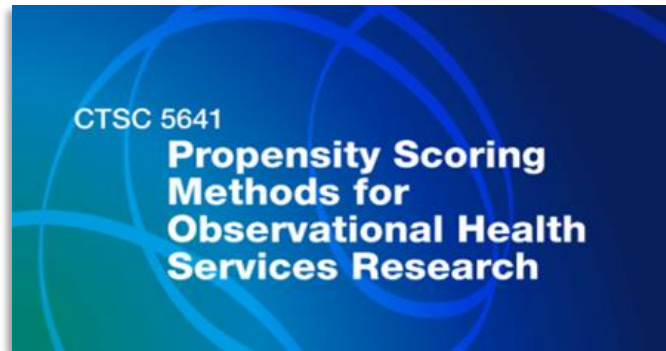


CTSC 5641 Propensity Scoring Methods for Observational Health Services Research



Faculty: Bijan Borah, Ph.D.

Credits: 1

Quarter: Spring

Prerequisites: CTSC 5600, 5610 and 5640
(previously or concurrently)

Overview

Propensity scoring methods are a set of potent tools that an empirical researcher can apply to mimic a randomized control trial retrospectively using an observational database. Randomized control trials are considered the “gold standard” but are not always feasible. As an alternative, propensity scoring methods have emerged as an alternative method for generating evidence on the efficacy and effectiveness of an intervention.

Objectives

After completing this course, participants will be able to:

1. Define the uses and limitations of propensity score methods including the assumptions that underlie propensity score methods
2. Distinguish between different propensity score methods and implement propensity score methods available in statistical software
3. Apply PS diagnostics, including assessment of the propensity score model and assessing the balance between covariates.
4. Apply propensity score methods to real-life case studies.
5. Demonstrate when to use propensity score methods.
6. Interpret literature related to propensity score methods.

Evaluation

This course will evaluate students on two quizzes accounting for 50% of the total grade and a final project where students will apply what they have learned to critically evaluate a published manuscript using propensity score methods.

Students will be expected to spend approximately two to four hours of time per week on this 1-credit course.

Additional online modules related to this topic are available on the [Continuous Professional Development website](#).

For specific dates and times this course is provided, please see the [quarterly detailed course schedule](#).