

Short Course on Patient-Reported Outcomes: Measurement, Implementation and Interpretation

Instructors: Joseph C. Cappelleri and Andrew G. Bushmakin, Pfizer Inc

When: Friday, June 26, 2015

7:30am - 8:30am Sign-in and Continental Breakfast

8:30am - 12:30pm Course

Location: Boston University

Boston University School of Public Health

Hiebert Lounge (14th floor of the Instructional Building)

72 East Concord Street, Boston MA

More Information and Course Registration:

<https://www.eventbrite.com/e/patient-reported-outcomes-measurement-implementation-and-interpretation-tickets-16957038960>

Register for the course via this Eventbrite link

Short Course Summary: This short course will provide an exposition on health measurement scales – specifically, on patient-reported outcomes. Some key elements in the development of a patient-reported outcome (PRO) measure will be noted. The core topics of validity and reliability of a PRO measure will be discussed. Exploratory factor analysis and confirmatory factor analysis, techniques to understand the underlying structure of a PRO measure, will be described. The topic of mediation modeling will be presented as a way to identify and explain the mechanism that underlies an observed relationship between an independent variable and a dependent variable via the inclusion of a third variable, known as a mediator variable. Approaches to interpret PRO results will be elucidated in order to make results useful and meaningful. Other topics such as item response theory and longitudinal analysis will be considered if time permits. Illustrations will be provided mainly through real-life examples and also through simulated examples using SAS.

Biography of Speakers

Joseph C. Cappelleri earned his MS in statistics from the City University of New York, his PhD in psychometrics from Cornell University, and his MPH in epidemiology from Harvard University. He is a senior director of statistics at Pfizer Inc and Fellow of the American Statistical Association. He has delivered numerous conference presentations and published extensively on clinical and methodological topics, including regression-discontinuity designs, meta-analysis, and health measurement scales.

Andrew G. Bushmakin earned his MS in applied mathematics and physics from the National Research Nuclear University (former Moscow Engineering Physics Institute, Moscow, Russia). He has more than 20 years of experience in mathematical modeling and data analysis. He is a director of statistics at Pfizer Inc. He has coauthored numerous articles and presentations on topics ranging from mathematical modeling of neutron physics processes to patient-reported outcomes.

Sponsored by the Boston Chapter of the American Statistical Association and the Boston University Biostatistics Department