

CRISP curriculum 2024 (draft)

Day	Date	Epidemiology	Biostatistics	Quality Improvement	Outcomes
Monday	7/8/24	Intro to classes, instructors, and students; survey; thinking about populations and risk; race vs. racism	Sample vs. population, SD, SE; survey results Part 1	Intro to QI, research vs. quality planning, QC, QI, and implementation science, intro to EHR data terminology	Overview of Clinical Outcome Assessments (COAs): Background; Terminology and Definitions; Applications; Regulatory Context; Evidence of Treatment Benefit; Patient-Focused Outcome Measurement
Tuesday	7/9/24	Study designs and measures of occurrence and excess risk	Hypothesis testing and confidence intervals	Charters, Aim statements; QI, the IRB, and data access permissions; process mapping and system analysis tools	Clinician-Reported Outcomes (ClinROs): Definition; Background and Uses; Types; Illustrative Examples
Wednesday	7/10/24	Causality and theoretical models	Types of variables and analyses		
Thursday	7/11/24	Study designs and measures of occurrence and excess risk, Part 2	Study designs	Comparing Slicer/Dicer, Reporting Workbench, and LEAF; Storing, cleaning and validating data; Pivot tables and key analytic displays.	Patient-Reported Outcomes (PROs): Topics: Definition; Background and Uses; Health Status and Health-Related Quality of Life; Value in Evaluating Treatment Benefit; Types; Illustrative Examples
Friday	7/12/24	Writing a research proposal -- Part 1	Developing hypotheses		
Monday	7/15/24	Interaction	Effect modification / subgroups	Working effectively with a database analyst, run charts and measures	Observer-Reported Outcomes (ObsROs): Definition; Background and Uses; Relationship to PROs; Child Health Status Assessment; Illustrative Examples
Tuesday	7/16/24	Causality	Confounding	Statistical process control introduction	Measurement Theories and Properties: Background; Terminology and Definitions; Theories and Approaches; Review Criteria; Illustrative Examples
Wednesday	7/17/24	Mediation	Regression		

CRISP curriculum 2024 (draft)

Day	Date	Epidemiology	Biostatistics	Quality Improvement	Outcomes
Thursday	7/18/24	Measurement and measurement error	Missing / Censored data	Driver diagrams, PDSA, equity impact analysis	Instrument Development: Concept Elicitation; Item Selection; Design; Cognitive Interviews
Friday	7/19/24	Writing a research proposal -- Part 2	Statistical analysis plans		
Monday	7/22/24	Case-control measures, appropriate questions, and bias issues	Logistic (and other) regression / Power calculations	SQUIRE guidelines, publishing QI work	Instrument Selection and Interpreting Change in Scores: Steps for Incorporating PROs Into Studies; Approaches to Interpreting Change; Minimal Clinically Important Difference (MCID); Responder Criteria; Illustrative Examples
Tuesday	7/23/24	Writing a research proposal -- Part 3	Sensitivity analyses	Guided Slicer/Dicer lab; Steve Pergam - achieving academic success as a learning health system scientist	1. Instrument Modification and Cultural Adaptation: Guidelines and Practice; Translation; Cultural Adaptation; Translatability; Cultural Equivalence
Wednesday	7/24/24	Bias	Bias		
Thursday	7/25/24	Metascience issues	Other big picture / hot topics	Lean techniques for process improvement	Incorporation of PROs Into Clinical Care: Context of PRO Use in Clinical Practice; Patient-Centered Assessment and Interpretation; Approaches to System Implementation; Governance; Alignment with Health System Goals; Learning Dissemination; Reporting Guidelines
Friday	7/26/24	Summary / Presentations	Summary / presentations		