

Supplementary File 5: Study Objectives, Outcomes, Hypotheses and Analysis Methods

Objective	Outcome	Hypothesis	Method of Analysis
Primary: To determine whether the MyREADY Transition™ BBD App intervention will result in improved transition readiness	Primary: • Change in TRAQ self-management score from Baseline to 6 months.	Intervention > Control	ANCOVA
	Secondary: • Change in TRAQ self-advocacy score from Baseline to 6 months.	Intervention > Control	ANCOVA
	Secondary • Health care transition experience	Individual semi-structured interviews	Qualitative Methods
Secondary: What is the effect of the MyREADY Transition™ BBD App intervention for improving health and use of health systems?	Primary: Population Health • Serious illness (hospitalizations, ICU admission questions from Resource Use Questionnaire • PedsQL™ Pediatric Quality of Life • TRANSITION-Q	Intervention > Control	ANCOVA for continuous outcomes Logistic regression for hospitalization
	Secondary: • Utilization MyREADY Transition™ BBD App	User metrics built into MyREADY Transition™ BBD App intervention to assess the extent to which various components of the intervention are accessed	Descriptive
	Secondary: Cost utility/cost-effectiveness • Health Utilities Index® (Hui2/3) • Resource Use Questionnaire	Evaluate changes in patients' health in relation to changes in cost to assess if the intervention represents an efficient allocation of health care resources	Descriptive. Cost-effectiveness analysis with support from Child-Bright health economics network team
	Secondary: • Achievement of health/life goals • COPM	Intervention > Control	Paired Student t-tests to compare mean ratings for performance and satisfaction on the COPM scoring system (10-point scale) with > 2 points difference as clinically meaningful difference

ANCOVA: Analysis of covariance

COPM: Canadian Occupational Performance Measure

HUI: Health Utilities Index®

ICU: Intensive Care Unit

TRAQ: Transition Readiness Assessment Questionnaire