Reporting Guide for Study Authors: Group Design Studies

The WWC considers information provided about a study's context, sample, design, analysis, and findings when evaluating a study using the WWC group design standards. This document provides guidance to study authors about how to describe group design studies and report their findings in a way that is clear, complete, and transparent. The first two sections detail the descriptive information, and the third section describes the data, that WWC reviewers use to assess studies. This document does not include information about how studies are judged against WWC design standards. For information about the WWC review process and design standards, please refer to the WWC Procedures and Standards Handbooks.

I. Study Characteristics and Context

Intervention and comparison conditions	**What curriculum, program, product, policy, or practice does the study evaluate? What services, if any, were provided to the comparison group?** Indicate the intervention's intended and actual duration, intensity, content, delivery, and any implementation supports provided. Specify whether the intervention was implemented with individuals, small groups, whole classes, or whole schools. Describe the intervention being evaluated and any services received by the comparison group in sufficient detail so that a reader understands the contrast between the two groups and what is being tested.
Study sample	**Who participated in the study?** In particular: • How old were students, or what grades were they in? • Were students from a general education population, or were they members of a special population (e.g., special education students or English learners)? • Did students attend charter, parochial, public, or private schools? • What are the students' background characteristics, including race or ethnicity, gender, and socioeconomic status?
Setting	**Where did the intervention occur?** Describe the study conditions, including: • The country or state • Whether the setting was urban, rural, or suburban • Whether the intervention occurred in- or out-of-school • Whether classrooms were regular or inclusion classrooms (if relevant) • Any other notable setting characteristics (e.g., a Title I school) • The teachers or other personnel involved in the study, including credentials, if relevant • Whether the intervention occurred in a charter, parochial, public, or private school (if relevant)

II. Study Design and Analysis

Measures	**What outcome measures were used to assess the impacts of the intervention?** Were the outcome measures collected using the same procedures for the intervention and comparison groups? Were the outcome measures standardized tests? If an outcome measure was not a standardized test, provide a complete description of the measure, how scores were calculated, and information on its psychometric properties (i.e., internal consistency, test-retest reliability, and inter-rater reliability). If an outcome measure was not administered and scored using established procedures, describe the procedures used.
Design	**How were eligible students, classrooms, teachers, and/or schools identified and recruited for the study? How were study participants assigned to the intervention and comparison groups?** Is the study a randomized controlled trial (RCT) or quasi-experimental design (QED)? For RCTs, when and how was random assignment conducted (including any stratification and the assignment probabilities)? For QEDs, how were participants identified for the comparison group? Were individuals or clusters of individuals (such as classrooms or schools) assigned to conditions?
Analytic approach	**What analytic models or methods were used to estimate impacts and calculate effect sizes?** In particular: • What method was used to compare outcomes for the intervention and comparison groups (e.g., linear regression, ANOVA, comparison of means)? • Which variables were controlled for in the analysis? • Was the analysis conducted using data on individuals, or were the data aggregated to groups (such as classrooms or schools) for analysis? • Which units (that is, students, teachers, classrooms, or schools) were included in the analytic sample—the sample used to measure the impact of the intervention? If any units were excluded, what was the reason? • For RCTs that assigned clusters to conditions, were any individuals who may have entered clusters after random assignment included in the analysis? When did those individuals enter clusters? • How were standard errors and statistical significance calculated, including any adjustments made to correct for clustering of standard errors or for testing multiple hypotheses (e.g., a Benjamini-Hochberg procedure was used to account for multiple outcomes)?
Missing data	**How did the analysis account for missing data?** Which methods and software were used to address missing data? Were these methods used to address missing outcome measures or pre-intervention measures? Did the methods used to calculate standard errors and statistical significance account for the presence of imputed data (e.g., by estimating impacts using multiple imputations)?

III. Study Data

The WWC requires different information on the data used for different studies. All studies should provide the information in Table 1, which allows WWC reviewers to assess the baseline equivalence of the intervention and comparison groups. Additional data should be provided for:

- RCTs that assign individuals to the intervention and comparison groups, to allow WWC reviewers to assess attrition (Table 2)
- Designs where clusters of individuals were assigned to the intervention and comparison groups, to allow WWC reviewers to assess baseline equivalence of clusters (as opposed to individuals) and the extent to which the sample is representative of clusters (Table 3)
- RCTs where clusters of individuals were randomly assigned to the intervention and comparison groups, to allow WWC reviewers to assess cluster-level attrition and non-response within clusters (Tables 3 and 4)
- Pre-intervention measures for which any observations are imputed or missing, to allow WWC reviewers to assess baseline equivalence in this special case (Table 5)
- Outcome measures that are imputed, to allow WWC reviewers to determine whether the study limits potential bias from imputed outcome data (Table 5)

The WWC requires additional information to conduct reviews of studies estimating complier average causal effects (CACEs). For details on how these studies are reviewed, see Section II.D of the WWC Standards Handbook.

Table 1. Information to include for each outcome measure, time point, and comparison

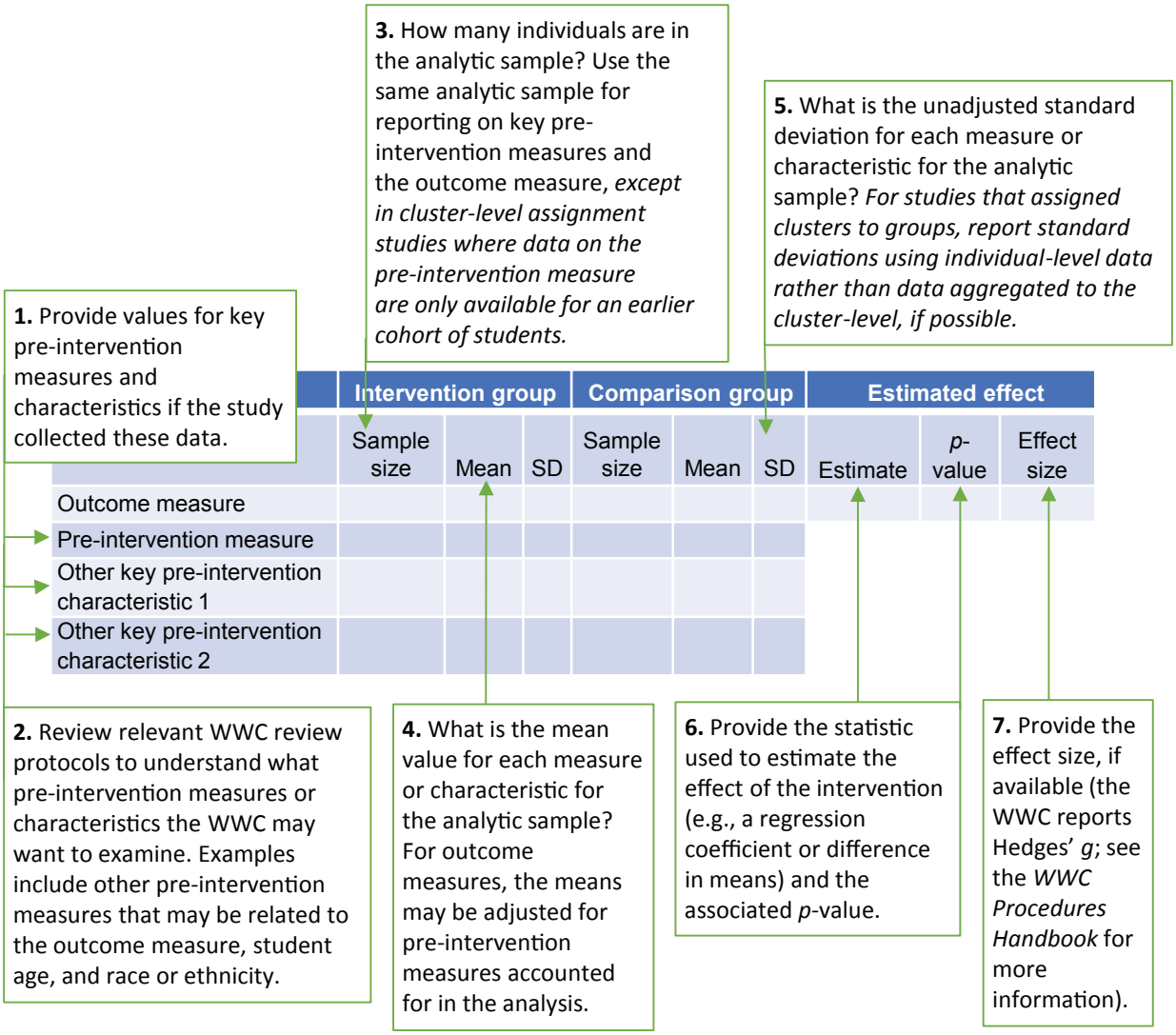

Table 2. Additional data to include for RCTs that assigned individuals to the intervention and comparison groups

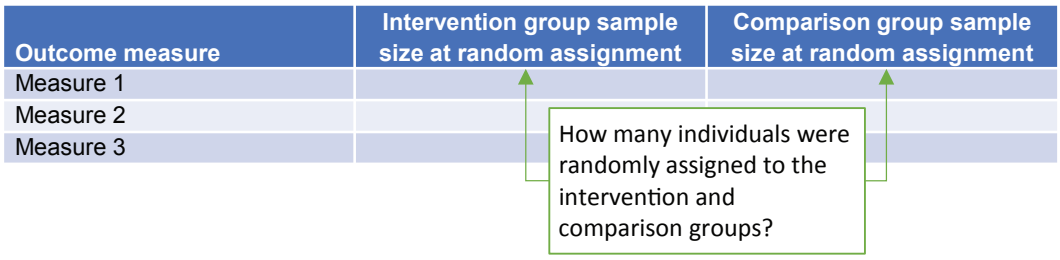

Table 3. Additional sample sizes to include for all studies that assigned clusters to the intervention and comparison groups

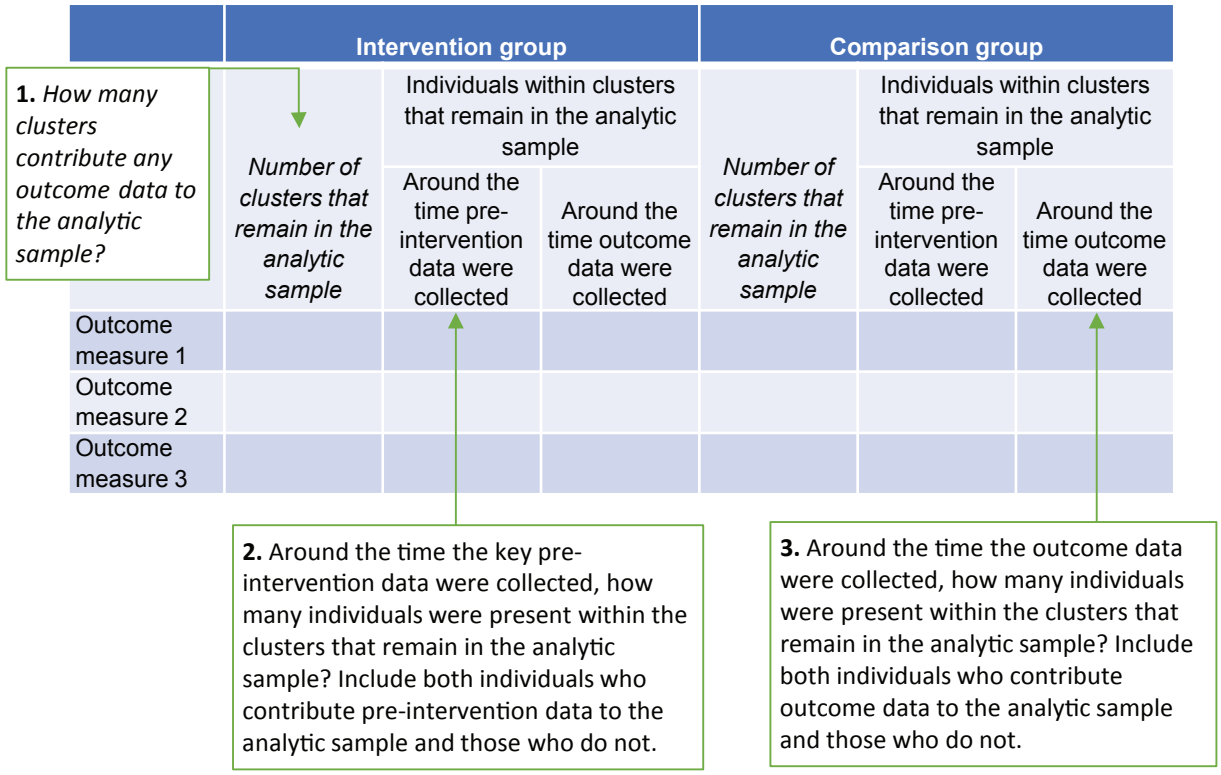

Table 4. Additional sample sizes to include for RCTs that assigned clusters to the intervention and comparison groups

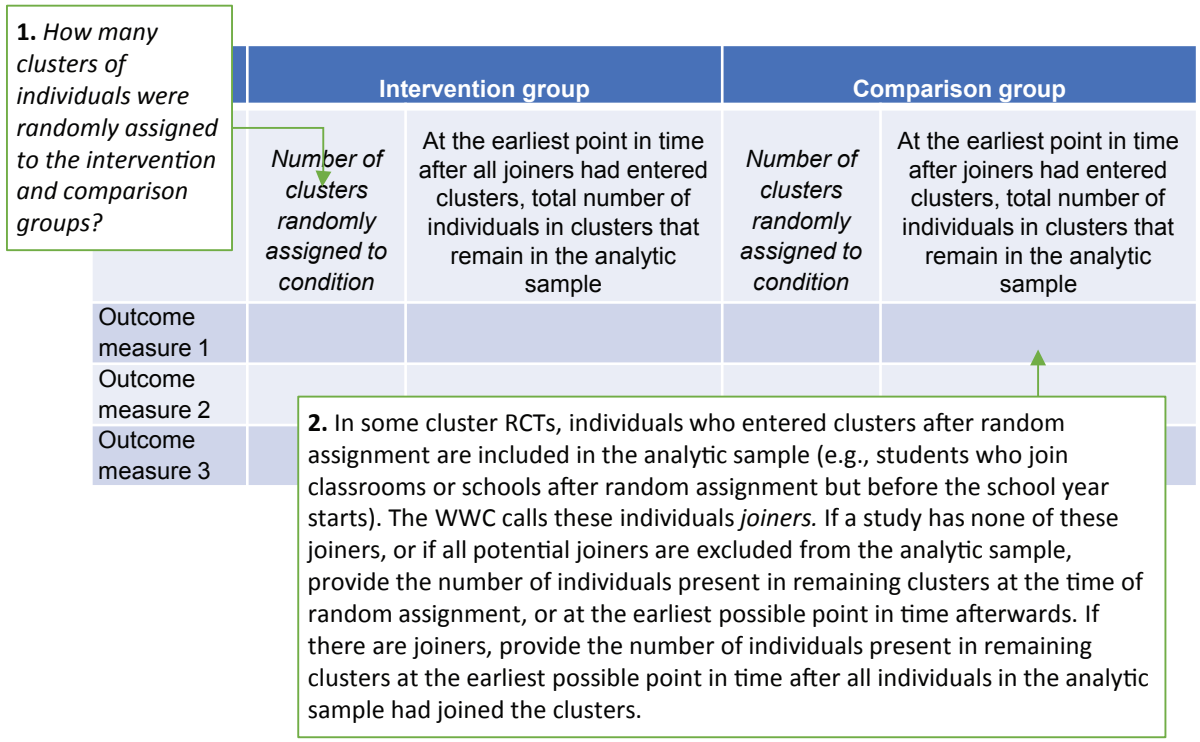

Table 5. Data to include for each pre-intervention measure for which any observations are missing or imputed in the analytic sample and each outcome measure for which any observations are imputed