Table Templates

The following templates illustrate some of the common types of data that PCORI investigators present in final research reports. They are not exhaustive. They highlight some common principles:

1. Show the data where possible, including number of events and absolute values on questionnaires/instruments.
2. Tables have limitations, so consider complementary figures to illustrate data distributions/distributions of effects. Further examples of complementary figures can be found [here](https://pmc.ncbi.nlm.nih.gov/articles/PMC9826437/).
3. Table titles and row/column labels should indicate the priority of outcomes (e.g., primary, secondary, exploratory). All unplanned analyses should be labelled “post hoc”.
4. Include both relative and absolute measures of effect. In many cases, both relative risk (RR) and risk difference (RD) should be reported for cohort studies and randomized trials.
5. Although reports may include p-values, they are not required in many contexts. In most contexts, authors should interpret results considering the magnitude, imprecision, and clinical importance of the estimated effects. Where reported, p-values should be exact.
6. In most cases, between-group differences should be reported as units on the original scale. Reports may include units that are not directly relevant to patients, caregivers, and clinicians (e.g., standardized mean differences), but these should not usually be the focus of tables, figures, and interpretation of findings. The range of measures, and plans for interpretation (e.g., minimum clinically important differences, scores that represent high functioning or low functioning), should be described both in the text and in the footnotes.
7. Include the statistical methods or models used for the results in the footnotes of the table. Specify the covariates or confounding variables included. Consider whether estimates are descriptive or causal, and ensure the methods align with the table title and description/interpretation in the text.
8. Summary data should be presented stratified by study groups of interest (e.g., treatment arms in a randomized trial or exposure groups in a non-randomized study).
9. Tests for baseline differences (e.g., p-values) have been described as “illogical” and should not be included in most cases in randomized trials. Other measures of differences across groups might be useful in some contexts. Observational studies using propensity score matching or inverse probability weighting might report standardized mean differences.
10. Missing data for each variable should be reported by (1) including a missing data level for categorical variables or (2) indicating the number of observed data points for each variable. Missing data should be reported for each group to facilitate evaluation of whether missingness patterns differ by group.
11. Percentages for counts in each cell can be displayed as either row percentages or column percentages, depending on the context.
12. Please see our [Table and Figure Policies](https://originreview.org/author-services/policies-and-reporting-guidelines/figure-table-and-permissions-policies/) for further guidance.

**Participant Characteristics Table Templates (e.g., baseline characteristics)**

Summary of study participants, potentially stratified by groups (e.g., baseline)

|  |  |  |
| --- | --- | --- |
|  | Group 1  (N) | Group 2  (N) |
| Normal Continuous Variable | Mean (SD) | Mean (SD) |

or

|  |  |  |
| --- | --- | --- |
|  | Group 1  (N) | Group 2  (N) |
| Non-normal Continuous Variable | Median (IQR) | Median (IQR) |

or

|  |  |  |
| --- | --- | --- |
|  | Group 1  (N) | Group 2  (N) |
| Categorical Variable |  |  |
| Level 1 | Count (%) | Count (%) |
| Level 2 | Count (%) | Count (%) |
| Level 3 | Count (%) | Count (%) |

**Comparison Table Templates**

Risk in a cohort study or randomized trial

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Group 1 | | Group 2 | | Effect size | | | |
|  | Events | People at risk | Events | People at risk | Risk ratio | 95% CI | Risk difference | 95% CI |
| Outcome 1 |  |  |  |  |  |  |  |  |
| Outcome 2 |  |  |  |  |  |  |  |  |
| Outcome 3 |  |  |  |  |  |  |  |  |
| Outcome 4 |  |  |  |  |  |  |  |  |

Rate in a cohort study or randomized trial

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Group 1 | | Group 2 | | Effect size | | | |
|  | Events | Person time | Events | Person time | Rate ratio | 95% CI | Rate difference | 95% CI |
| Outcome 1 |  |  |  |  |  |  |  |  |
| Outcome 2 |  |  |  |  |  |  |  |  |
| Outcome 3 |  |  |  |  |  |  |  |  |
| Outcome 4 |  |  |  |  |  |  |  |  |

Multiple dichotomous outcomes at a single time in a case-control study (odds ratio)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Group 1 | | Group 2 | | Effect size, unadjusted (if applicable) | | Effect size, adjusted (if applicable) | |
|  | Events | People (or person time) | Events | People (or person time) | Odds ratio | 95% CI | Odds ratio | 95% CI |
| Outcome 1 |  |  |  |  |  |  |  |  |
| Outcome 2 |  |  |  |  |  |  |  |  |
| Outcome 3 |  |  |  |  |  |  |  |  |
| Outcome 4 |  |  |  |  |  |  |  |  |

Note: Attributable risk reduction (ARR) might be calculated and reported for non-randomized studies, but ARR does not need to be included in tables.

**Comparison Table Templates, Continued**

Multiple continuous measures at a single time, or change between two times (mean difference)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Group 1 | | | Group 2 | | | Effect size, unadjusted (if applicable) | |  | Effect size, adjusted (if applicable) | |
|  | Mean change | SD | N | Mean change | SD | N | Mean difference | 95% CI |  | Mean difference | 95% CI |
| Measure 1 |  |  |  |  |  |  |  |  |  |  |  |
| Measure 2 |  |  |  |  |  |  |  |  |  |  |  |
| Measure 3 |  |  |  |  |  |  |  |  |  |  |  |

A single continuous measure at multiple times (mean difference)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Group 1 | | | Group 2 | | | Effect size, unadjusted (if applicable | | Effect size, adjusted (if applicable) | |
|  | Mean | SD | N | Mean | SD | N | Mean difference | 95% CI | Mean difference | 95% CI |
| Time 1 (e.g., baseline) |  |  |  |  |  |  |  |  |  |  |
| Time 2 |  |  |  |  |  |  |  |  |  |  |
| Time 3 |  |  |  |  |  |  |  |  |  |  |
| Time 4 |  |  |  |  |  |  |  |  |  |  |
| Change (T# to T#) |  |  |  |  |  |  |  |  |  |  |

A single survival outcome at multiple times (survival rate and hazard rate)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Group 1 | | Group 2 | | | Effect size | | | |
|  | Events | Person time | Survival rate | Events | Person time | Survival rate | Hazard ratio | 95% CI | Rate difference (if possible) | 95% CI |
| Time 1 |  |  |  |  |  |  |  |  |  |  |
| Time 2 |  |  |  |  |  |  |  |  |  |  |
| Time 3 |  |  |  |  |  |  |  |  |  |  |
| Time 4 |  |  |  |  |  |  |  |  |  |  |

**Interaction Table Templates**

Two Categorical Interacting Variables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Two Categorical Interacting Variables** | **Effect Estimate (Mean difference, HR, OR, etc.)** | **95% CI** | **P-value** | **Interaction**  **P-value** |
| **Interacting variable 1, group 1** |  |  |  |  |
| Interacting variable 2, group 1 (reference) |  |  |  |  |
| Interacting variable 2, group 2 | Estimate | 95% CI | P-value |  |
| **Interacting variable 1, group 2** |  |  |  |  |
| Interacting variable 2, group 1 (reference) |  |  |  |  |
| Interacting variable 2, group 2 | Estimate | 95% CI | P-value |  |
|  |  |  |  |  |
| **Interacting variable 2, group 1** |  |  |  |  |
| Interacting variable 1, group 1 (reference) |  |  |  |  |
| Interacting variable 1, group 2 | Estimate | 95% CI | P-value |  |
| **Interacting variable 2, group 2** |  |  |  |  |
| Interacting variable 1, group 1 (reference) |  |  |  |  |
| Interacting variable 1, group 2 | Estimate | 95% CI | P-value |  |

Note: For two interacting categorical variables, each having two levels, there are three associated model parameters – one main effect for each variable and an interaction term. The effect or association of each variable depends on the levels of the other variable, and this effect is obtained by combining the main effect and interaction terms. For presentation, it is typically best for the analyst to conduct this step and present the data as an estimated effect for each variable, conditional on the levels of the other variable. In the case of two categorical variables each with two levels, this amounts to four effect estimates as displayed above.

**Interaction Table Templates, Continued**

One Categorical, One Continuous Interacting Variable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **One Categorical, One Continuous  Interacting Variables** | **Effect Estimate (Mean difference, HR, OR, etc.)** | **95% CI** | **P-value** | **Interaction**  **P-value** |
| **Interacting variable 1 (categorical), group 1** | **Should this say “reference”?** |  |  |  |
| Interacting variable 2, (continuous) | Estimate | 95% CI | P-value |  |
| **Interacting variable 1 (categorical), group 2** |  |  |  |  |
| Interacting variable 2, (continuous) | Estimate | 95% CI | P-value |  |
| **Effect of variable 1** at clinically meaningful  value of variable 2 (mean, median, pre-specified) | Estimate | 95% CI | P-value |  |

Note: For tone categorical interacting variable (here, with two levels) and one continuous interacting variable, the recommendation is to display the effect associated with the continuous variable for each group of the categorical variable. The effect of the categorical variable should be displayed for a meaningful value of the continuous variable, such as the mean, median, or some other clinically specified value. This can be accomplished by centering the continuous variable according to that value. In the absence of this, the effect coincides with a zero value for the continuous variable which is often clinically meaningless (e.g., a weight or age of zero).

Two Continuous Interacting Variables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Two Continuous Interacting Variables** | **Effect Estimate (Mean difference, HR, OR, etc.)** | **95% CI** | **P-value** | **Interaction**  **P-value** |
| **Effect of variable 1** at clinically meaningful  value of variable 2 (mean, median, pre-specified) |  |  |  |  |
| **Effect of variable 2** at clinically meaningful  value of variable 1 (mean, median, pre-specified) |  |  |  |  |
| **Interaction effect between variable 1 and variable 2** |  |  |  |  |

Note: For with two continuous interacting variables, both variables should be centered at a meaningful value (mean, median, clinically pre-specified value). Then the effects of each variable are displayed at clinically meaningful values of the other variable, and the interaction effect provides the difference in effect for each variable as they deviate from that centering value.