

Evaluation designs (adapted from the Cochrane Handbook for Systematic Reviews of Interventions*)

Randomised controlled trial	<ul style="list-style-type: none"> An experimental study in which individuals are randomly allocated to receive different interventions (e.g. using the toss of a coin or a list of random numbers generated by a computer)
Cluster randomised trial	<ul style="list-style-type: none"> An experimental study in which groups of people (e.g. school classes or hospitals) are randomly allocated to receive different interventions
Non-randomised controlled trial	<ul style="list-style-type: none"> An experimental study in which people are allocated to different interventions using methods that are not random (e.g. patients admitted during Week 1 receive intervention A, those admitted in Week 2 receive intervention B, those in Week 3 receive intervention A again, and so on)
Controlled before-and-after study	<ul style="list-style-type: none"> A study in which observations are made before and after the implementation of an intervention, both in a group that receives the intervention and in a control group that does not. Data collection should usually be done concurrently in the two groups
Interrupted-time-series study	<ul style="list-style-type: none"> A study using observations at multiple time points before and after an intervention. Measurements are <i>interrupted</i> by the intervention. The design attempts to detect whether an intervention has had an effect significantly greater than any underlying trend over time
Historically controlled study	<ul style="list-style-type: none"> A study comparing a group of participants receiving an intervention with a similar group from the past who did not
Cohort study	<ul style="list-style-type: none"> A study in which a defined group of people (the cohort) is followed over time, to examine associations between different interventions received and subsequent outcomes. A <i>prospective</i> cohort study recruits participants before any intervention and follows them into the future. A <i>retrospective</i> cohort study identifies subjects from past records, describing the interventions received and follows them from the time of those records
Case-control study	<ul style="list-style-type: none"> A study comparing people with a specific outcome of interest (<i>cases</i>) with people from the same source population but without that outcome (<i>controls</i>), to examine the association between the outcome and prior exposure (e.g. receiving an intervention). This design is particularly useful when the outcome is rare
Cross-sectional study	<ul style="list-style-type: none"> A study collecting information on past or present interventions and current health outcomes for a group of people at a particular point in time. This kind of study examines associations between the outcomes and exposure to interventions
Qualitative study	<ul style="list-style-type: none"> A study conducted in a natural setting which is usually designed to interpret or make sense of phenomena in terms of the meanings people bring to them. Typically in such a study, narrative data are collected from individuals or groups of 'informants' or from documents. These are then interpreted by the researcher(s)

* Cochrane Collaboration. Cochrane Handbook for Systematic Reviews of Interventions. Chichester: The Cochrane Collaboration and John Wiley & Sons Ltd.; 2008