

Designing streamlined, affordable, large multi-centre randomized trials

An asset-light trial evaluates a simple, scalable intervention embedded in routine care, delivered consistently across many sites, and uses existing data. A feature is that intervention delivery and trial execution add minimal workload and cost for each participating site.

Trial concepts that are the best fit:

① Trial procedures and intervention fit naturally into busy, routine care

- Easy to implement: Easy for busy care teams to deliver the intervention and any other trial procedures with minimal extra workload, training, or new resources.
- Simple by design: The intervention is intentionally straightforward, so adherence to the assigned approach (intervention vs control) should be very high under usual-care conditions.

④ Both groups are acceptable, high-quality care

- The intervention and comparator groups are both reasonable standard-of-care options that patients would find acceptable.
- What participants receive in the trial aligns with existing practice variation.

⑥ Intervention is “behind the scenes” for patients

- Built into routine operations: The intervention is implemented as part of usual care, with minimal patient burden and little or no extra action required.
- *Example*: A patient consents to hemodialysis, but the dialysis filter type (Health Canada-approved options) is usually determined by availability and standard renal program procurement processes, not influenced by patient awareness or preference.

② Scales easily if it works

- If the trial shows benefit, the intervention can be adopted widely exactly as tested, with little added effort or resources.
- This is what drives real-world impact.

③ Can include “nearly everyone”

- Few barriers to enrolling patients: the intervention can be applied to most or all patients in a setting (for example, emergency department, operating room, hemodialysis).
- Minimal inclusion/exclusion criteria.

⑤ Randomization adds minimal incremental risk

- Risks are similar to what patients already experience in routine care.
- The added risk of being randomized to one option vs another is low.

⑦ Data are easy to capture

- Baseline characteristics and outcomes can be captured reliably using existing electronic sources, such as the electronic medical record, clinical registries, or population-based administrative data.

🌟 Why this matters

These features often enable a large multi-site trial to be run without on-site research coordinators, substantially reducing costs. They also enable broad participation and faster recruitment, increasing the likelihood that the trial finishes on time and on budget.