

# Clinical trial

[Clinical trials](#) have been the main tool used by the health sciences community to test and evaluate [intervention]]s.

Clinical trials describe the methodology, implementation, and results of a [controlled study](#), usually undertaken with large patient groups.

Clinical trial articles are also long, usually of about the same length as an original research article. Clinical trials also require practical work experience, as well as, high standards of ethics and reliability.<sup>5</sup> So this format is more useful for experienced researchers.

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Clinical [trials](#) are [experiments](#) or [observations](#) done in clinical [research](#). Such [prospective](#) biomedical or behavioral research studies on [human](#) participants are designed to answer specific questions about biomedical or behavioral interventions, including new [treatments](#) (such as novel vaccines, drugs, dietary choices, dietary supplements, and medical devices) and known interventions that warrant further study and comparison. Clinical trials generate data on [safety](#) and [efficacy](#).

They are conducted only after they have received health authority/ethics committee approval in the country where approval of the therapy is sought. These authorities are responsible for vetting the risk/benefit ratio of the trial – their approval does not mean that the therapy is 'safe' or effective, only that the trial may be conducted.

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An [interventional study](#) refers specifically to a clinical [trial](#) in which [researchers](#) are testing a [treatment](#) method. The [drug](#) development pipeline refers mainly to clinical trials.

Clinical [trials](#) are substantial financial [investments](#) for their [sponsors](#) and substantial time investments for participating clinicians and patients. Trials, when done well, can change the standard of care, offering new hope for some diseases or improved understanding for others. Yet there are persistent concerns that the results of many trials languish, unpublished and unreported, preventing the scientific community from acting on important clinical data <sup>1)</sup>.

[Publication](#) of clinical [trials](#), especially those with negative results, remains vital, helping to improve future trials, steering resources away from fruitless therapies, and informing patients about better clinical approaches. Publication [bias](#) has its roots in both the trialists who write papers—or neglect to—and the journals that reject them. Encouragingly, there are some indications that publication bias has improved at the journal level, with more negative trials getting to press <sup>2) 3)</sup>.

## Classification

[Clinical trial classification](#)

## Registration

[Clinical trial registration](#).

## Phases

There are 3 main phases of clinical trials – phases 1 to 3. [Phase 1 trials](#) are the earliest phase trials and phase 3 are later phase trials. Some trials have an earlier stage called phase 0, and there are some phase 4 trials done after a drug has been licensed.

## Design

[Clinical trial design](#).

## Recruiting

Recruiting [participants](#) into [clinical trials](#) continues to be a challenge, which can result in study delay or termination. Recent studies have used [social media](#) to enhance recruitment outcomes. An assessment of the literature on the use of social media for this purpose is required.

A study aimed to answer the following questions: (1) How is the use of social media, in combination with traditional approaches to enhance clinical trial recruitment and enrollment, represented in the literature? and (2) Do the data on recruitment and enrollment outcomes presented in the literature allow for comparison across studies?

They conducted a comprehensive literature search across 7 platforms to identify clinical trials that combined social media and traditional methods to recruit patients. Study and participant characteristics, recruitment methods, and recruitment outcomes were evaluated and compared.

They identified 2371 titles and abstracts through our systematic search. Of these, they assessed 95 full papers and determined that 33 studies met the inclusion criteria. A total of 17 studies reported enrollment outcomes, of which 9 achieved or exceeded their enrollment target. The proportion of participants enrolled from social media in these studies ranged from 0% to 49%. Across all 33 studies, the proportion of participants recruited and enrolled from social media varied greatly. A total of 9 studies reported higher enrollment rates from social media than any other methods, and 4 studies reported the lowest cost per enrolled participant from social media.

While the assessment of the use of social media to improve [clinical trial](#) participation is hindered by reporting inconsistencies, preliminary data suggest that social media can increase participation and reduce per-participant cost. The adoption of consistent standards for reporting recruitment and enrollment outcomes is required to advance our understanding and use of social media to support clinical trial success. <sup>4)</sup>

## References

<sup>1)</sup>  
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