IMPROVING PATIENT RECRUITMENT FOR CLINICAL TRIALS: AN ANALYTICAL APPROACH

Abstract

Patient recruitment is an essential aspect of clinical trials, but it can also be one of the most challenging. This paper explores the challenges of patient recruitment for clinical trials and discusses several analytical solutions that can be used to overcome these challenges. These solutions include educating patients and providers, making it easier to find clinical trials, providing financial assistance, and addressing patient concerns. By using these solutions, clinical trials can improve patient recruitment and make it easier for patients to access the latest treatments.
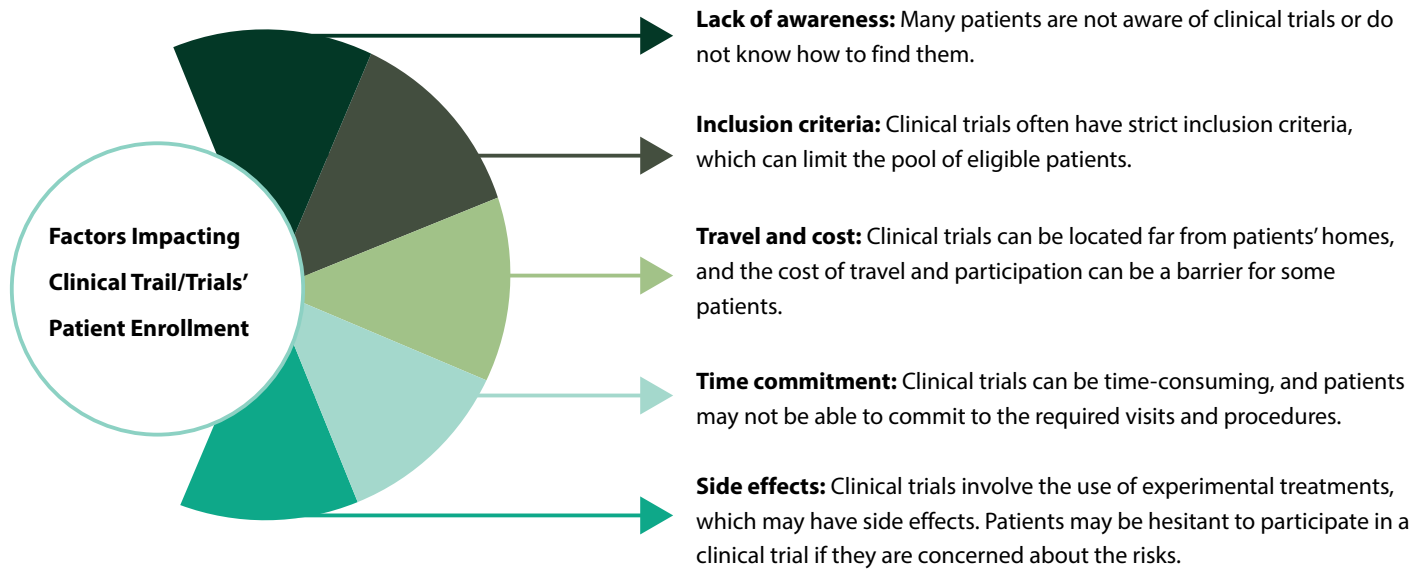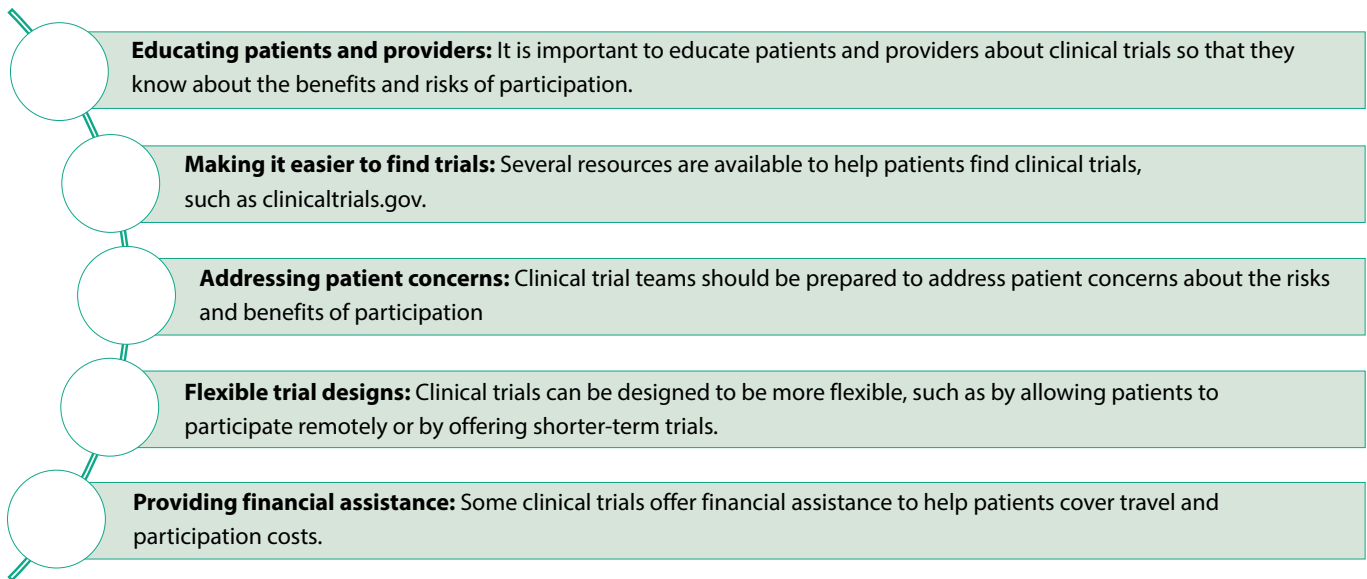
Infosys®
Navigate your next

Table of Contents

Introduction

Patient recruitment is one of the most important aspects of clinical trials, but it can also be one of the most challenging. Numerous factors may impede patient recruitment for clinical trials.

Factors Impacting Clinical Trail/Trials' Patient Enrollment

Lack of awareness: Many patients are not aware of clinical trials or do not know how to find them.

Inclusion criteria: Clinical trials often have strict inclusion criteria, which can limit the pool of eligible patients.

Travel and cost: Clinical trials can be located far from patients' homes, and the cost of travel and participation can be a barrier for some patients.

Time commitment: Clinical trials can be time-consuming, and patients may not be able to commit to the required visits and procedures.

Side effects: Clinical trials involve the use of experimental treatments, which may have side effects. Patients may be hesitant to participate in a clinical trial if they are concerned about the risks.

There are several things that can be done to overcome these challenges and improve patient recruitment for clinical trials. These include:

Educating patients and providers: It is important to educate patients and providers about clinical trials so that they know about the benefits and risks of participation.

Making it easier to find trials: Several resources are available to help patients find clinical trials, such as clinicaltrials.gov.

Addressing patient concerns: Clinical trial teams should be prepared to address patient concerns about the risks and benefits of participation

Flexible trial designs: Clinical trials can be designed to be more flexible, such as by allowing patients to participate remotely or by offering shorter-term trials.

Providing financial assistance: Some clinical trials offer financial assistance to help patients cover travel and participation costs.

By taking these steps, we can improve patient recruitment for clinical trials and make it easier for patients to access the latest treatments.

Here are some additional tips for overcoming patient recruitment challenges in each area:
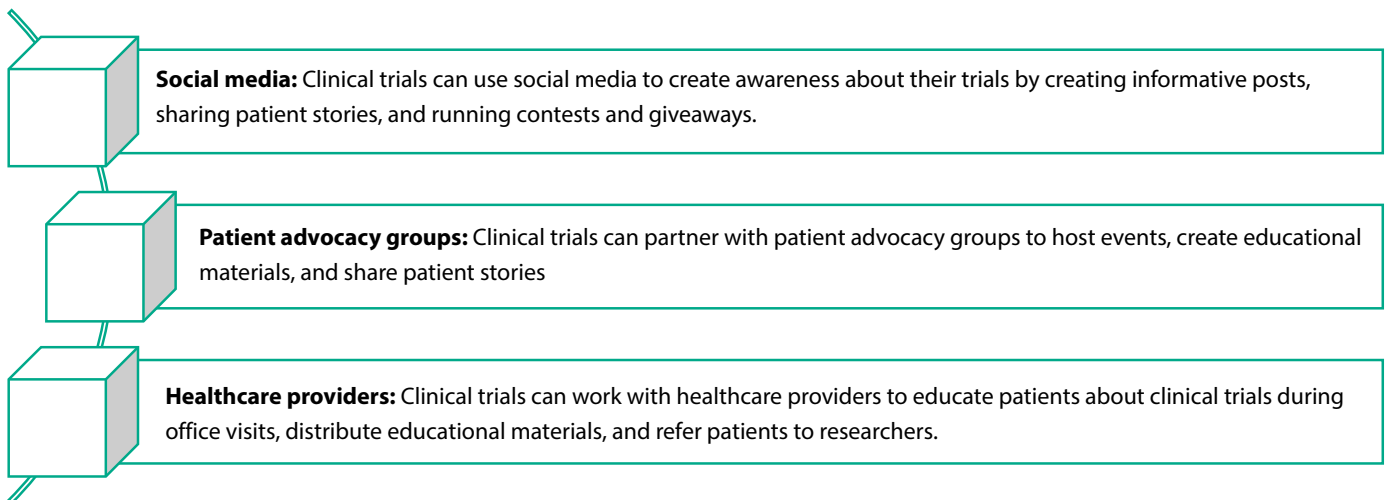
| Lack of awareness | Inclusion criteria | Travel and cost | Time commitment | Side effects |
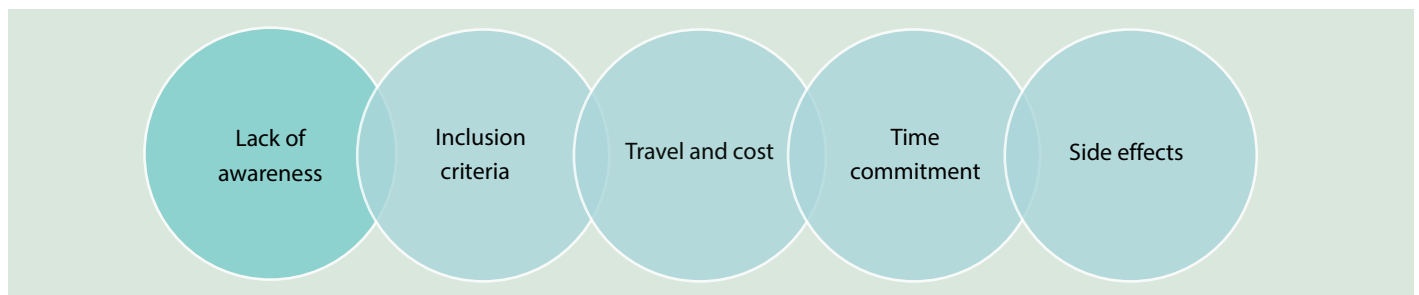
Lack of awareness

Use a variety of channels to reach patients, including social media, patient advocacy groups, and healthcare providers. There are several analytical solutions that can be used to help with the lack of awareness of clinical trials. These include:

Social media	Social media is a powerful tool for reaching a large audience. Clinical trials can use social media to create awareness about their trials, recruit patients, and answer questions.
Patient advocacy groups	Patient advocacy groups are a great way to reach patients who are already interested in clinical trials. These groups can help to spread the word about clinical trials and connect patients with researchers.
Healthcare providers	Healthcare providers are in a unique position to reach patients who may be eligible for clinical trials. They can educate patients about clinical trials and refer them to researchers.

By using a variety of channels to reach patients, clinical trials can increase awareness about their trials and recruit more patients.

Here are some specific examples of how these channels can be used:

Social media: Clinical trials can use social media to create awareness about their trials by creating informative posts, sharing patient stories, and running contests and giveaways.

Patient advocacy groups: Clinical trials can partner with patient advocacy groups to host events, create educational materials, and share patient stories

Healthcare providers: Clinical trials can work with healthcare providers to educate patients about clinical trials during office visits, distribute educational materials, and refer patients to researchers.

By using these channels, clinical trials can increase awareness about their trials and recruit more patients.

Lack of awareness | Inclusion criteria | Travel and cost | Time commitment | Side effects
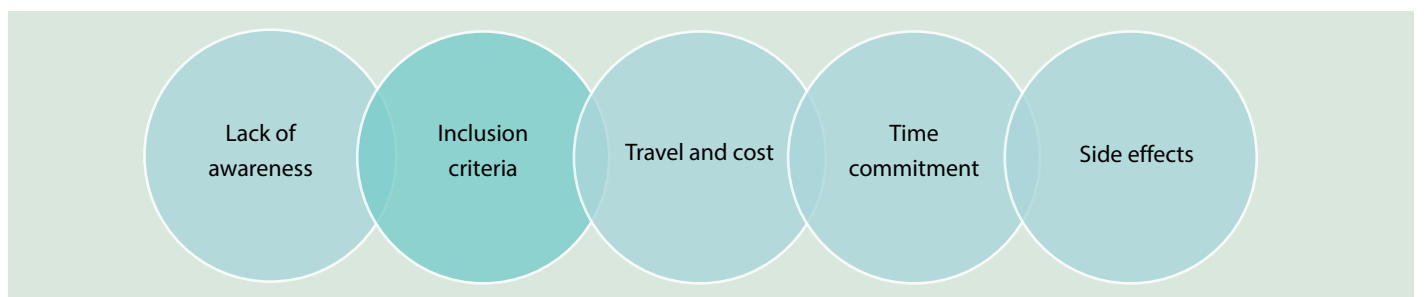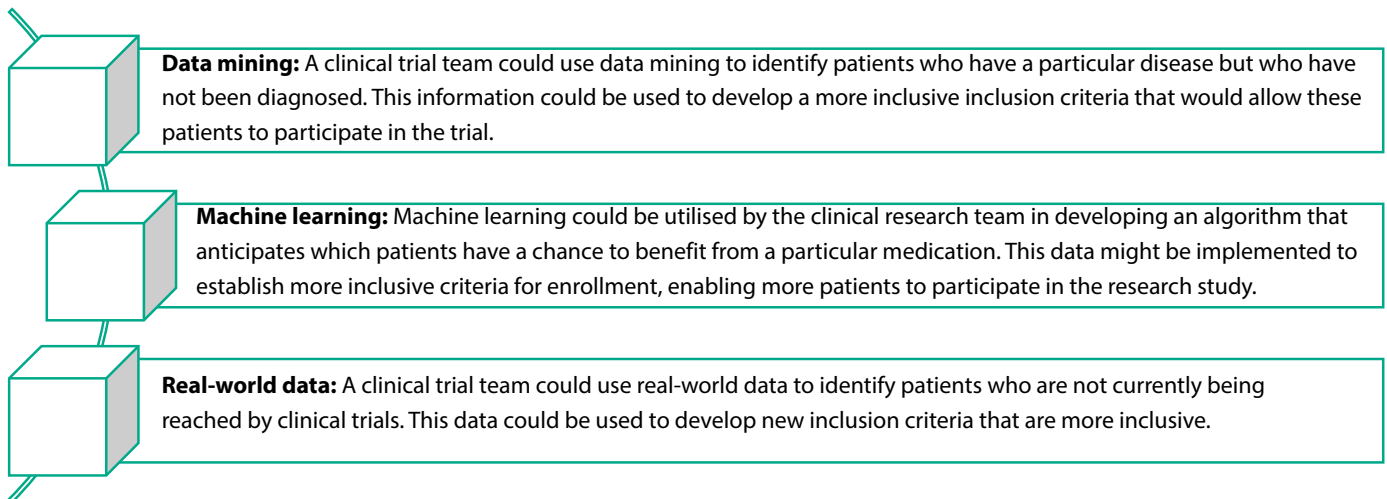
Inclusion criteria

Make sure that your inclusion criteria are as broad as possible to maximize the pool of eligible patients. There are a number of analytical solutions that can be used to help with inclusion criteria. These include:
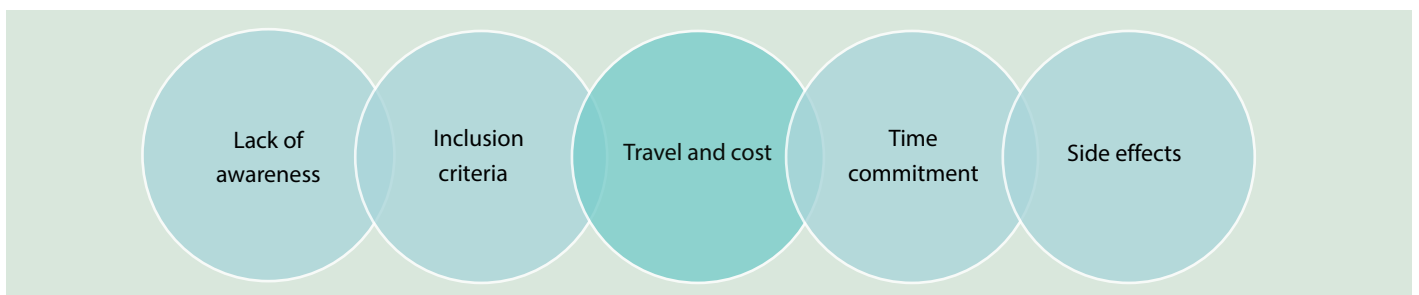
Data mining	Data mining can be used to identify patients who are likely to be eligible for clinical trials. This can be done by analyzing patient data, such as medical records, demographics, and lifestyle factors.
Machine learning	Machine learning can be used to develop algorithm to predict which patients will likely benefit from a particular treatment. This information can be used to create a more inclusive inclusion criteria.
Real-world data	Real-world data can be used to identify patients who are not currently being reached by clinical trials. This data can be used to develop new inclusion criteria that are more inclusive.

By using these analytical solutions, clinical trials can make their inclusion criteria more inclusive and recruit more patients.

Here are some specific examples of how these solutions can be used:

Data mining: A clinical trial team could use data mining to identify patients who have a particular disease but who have not been diagnosed. This information could be used to develop a more inclusive inclusion criteria that would allow these patients to participate in the trial.

Machine learning: Machine learning could be utilised by the clinical research team in developing an algorithm that anticipates which patients have a chance to benefit from a particular medication. This data might be implemented to establish more inclusive criteria for enrollment, enabling more patients to participate in the research study.

Real-world data: A clinical trial team could use real-world data to identify patients who are not currently being reached by clinical trials. This data could be used to develop new inclusion criteria that are more inclusive.

By using these solutions, clinical trials can make their inclusion criteria more inclusive and recruit more patients.

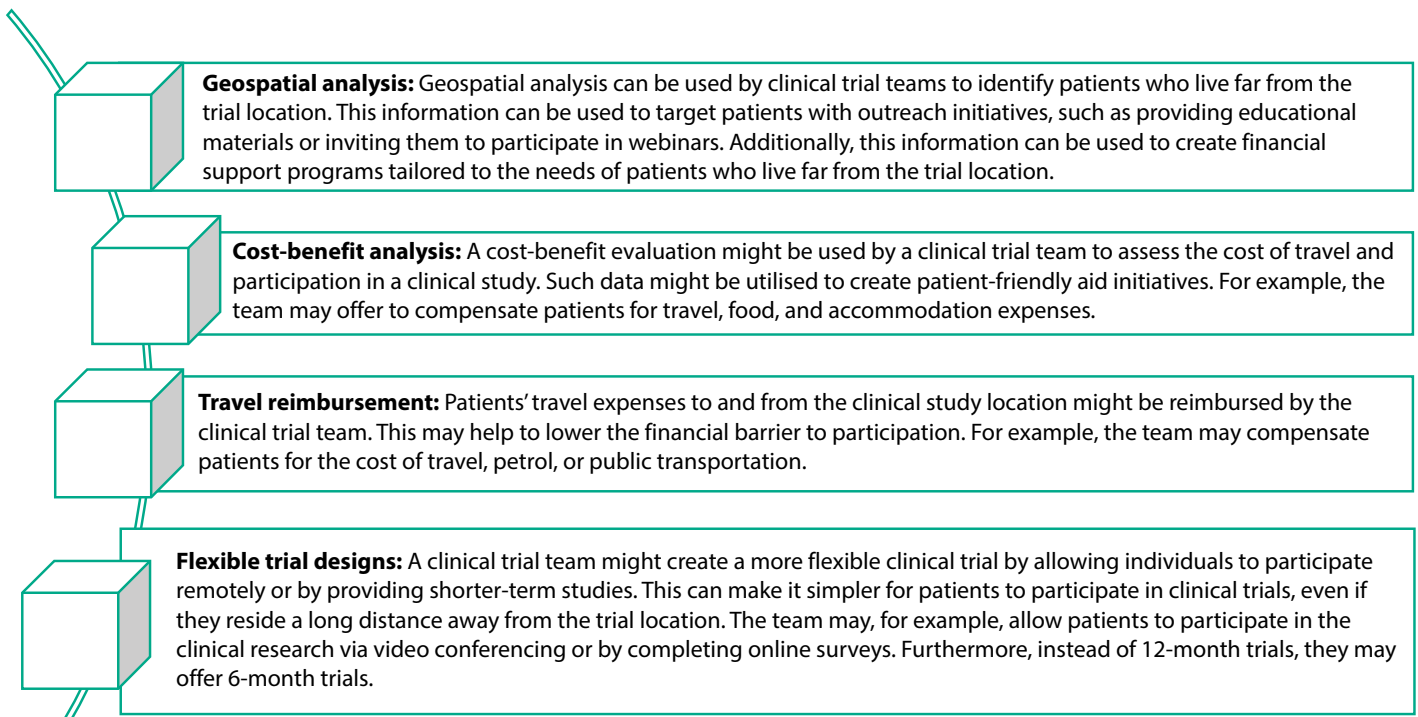| Lack of awareness	Inclusion criteria	Travel and cost	Time commitment	Side effects

Travel and cost

Offer financial assistance to help patients cover the costs of travel and participation. There are several analytical solutions that can be used to help with travel and cost. These include:
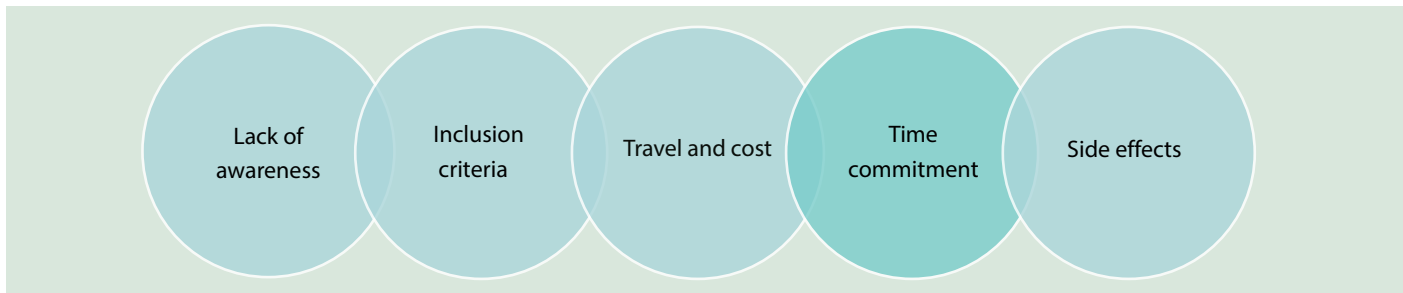

Geospatial analysis	Geospatial analysis can be used to identify patients who are located far from clinical trial sites. This information can be used to target patients with outreach efforts and to provide financial assistance for travel.
Cost-benefit analysis	Cost-benefit analysis can be used to determine the cost of travel and participation in a clinical trial. This information can be used to develop financial assistance programs that are affordable for patients.
Travel reimbursement	Clinical trials can reimburse patients for the cost of travel to and from the clinical trial site. This can help to reduce the financial barrier to participation.
Flexible trial designs	Clinical trials can be designed to be more flexible, such as by allowing patients to participate remotely or by offering shorter-term trials. This can make it easier for patients to participate in a clinical trial, even if they live far from the clinical trial site.

By using these analytical solutions, clinical trials can reduce the cost of travel and participation and make it easier for patients to participate in clinical trials.

Here are some specific examples of how these solutions can be used:

Geospatial analysis: Geospatial analysis can be used by clinical trial teams to identify patients who live far from the trial location. This information can be used to target patients with outreach initiatives, such as providing educational materials or inviting them to participate in webinars. Additionally, this information can be used to create financial support programs tailored to the needs of patients who live far from the trial location.

Cost-benefit analysis: A cost-benefit evaluation might be used by a clinical trial team to assess the cost of travel and participation in a clinical study. Such data might be utilised to create patient-friendly aid initiatives. For example, the team may offer to compensate patients for travel, food, and accommodation expenses.

Travel reimbursement: Patients' travel expenses to and from the clinical study location might be reimbursed by the clinical trial team. This may help to lower the financial barrier to participation. For example, the team may compensate patients for the cost of travel, petrol, or public transportation.

Flexible trial designs: A clinical trial team might create a more flexible clinical trial by allowing individuals to participate remotely or by providing shorter-term studies. This can make it simpler for patients to participate in clinical trials, even if they reside a long distance away from the trial location. The team may, for example, allow patients to participate in the clinical research via video conferencing or by completing online surveys. Furthermore, instead of 12-month trials, they may offer 6-month trials.

By using these solutions, clinical trials can reduce the cost of travel and participation and make it easier for patients to participate in clinical trials.

| Lack of awareness | Inclusion criteria | Travel and cost | Time commitment | Side effects |

Time commitment

Make sure that your clinical trial is designed to be as time efficient as possible. There are several analytical solutions that can be used to help with time commitment. These include:
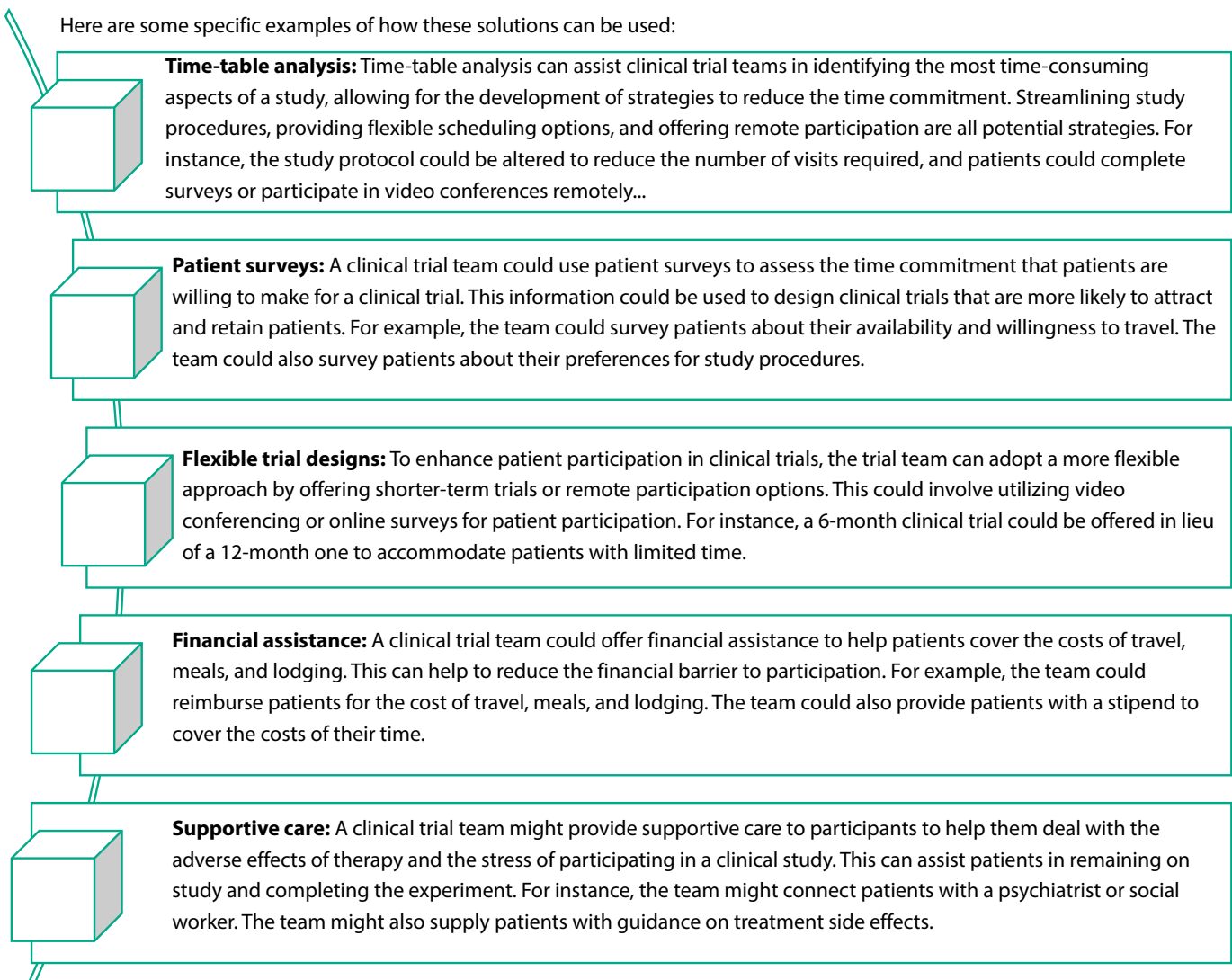
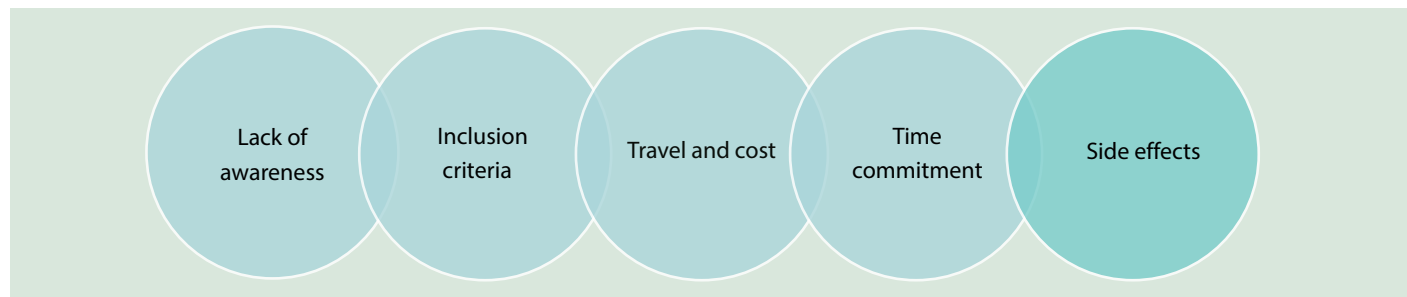|	
Time-table analysis	Time-table analysis can be used to identify the most time-consuming aspects of a clinical trial. This information can be used to develop strategies for reducing the time commitment, such as by streamlining the study procedures or by offering flexible scheduling options.
Patient surveys	Patient surveys can be used to assess the time commitment that patients are willing to make for a clinical trial. This information can be used to design clinical trials that are more likely to attract and retain patients.
Flexible trial designs	Clinical trials can be designed to be more flexible, such as by allowing patients to participate remotely or by offering shorter-term trials. This can make it easier for patients to participate in a clinical trial, even if they have limited time.
Financial assistance	Clinical trials can offer financial assistance to help patients cover the costs of travel, meals, and lodging. This can help to reduce the financial barrier to participation.
Supportive care	Clinical trials can offer supportive care to help patients manage the side effects of treatment and the stress of participating in a clinical trial. This can help patients to stay on the study and complete the trial

By using these analytical solutions, clinical trials can reduce the time commitment and make it easier for patients to participate in clinical trials.

Here are some specific examples of how these solutions can be used:

Time-table analysis: Time-table analysis can assist clinical trial teams in identifying the most time-consuming aspects of a study, allowing for the development of strategies to reduce the time commitment. Streamlining study procedures, providing flexible scheduling options, and offering remote participation are all potential strategies. For instance, the study protocol could be altered to reduce the number of visits required, and patients could complete surveys or participate in video conferences remotely...

Patient surveys: A clinical trial team could use patient surveys to assess the time commitment that patients are willing to make for a clinical trial. This information could be used to design clinical trials that are more likely to attract and retain patients. For example, the team could survey patients about their availability and willingness to travel. The team could also survey patients about their preferences for study procedures.

Flexible trial designs: To enhance patient participation in clinical trials, the trial team can adopt a more flexible approach by offering shorter-term trials or remote participation options. This could involve utilizing video conferencing or online surveys for patient participation. For instance, a 6-month clinical trial could be offered in lieu of a 12-month one to accommodate patients with limited time.

Financial assistance: A clinical trial team could offer financial assistance to help patients cover the costs of travel, meals, and lodging. This can help to reduce the financial barrier to participation. For example, the team could reimburse patients for the cost of travel, meals, and lodging. The team could also provide patients with a stipend to cover the costs of their time.

Supportive care: A clinical trial team might provide supportive care to participants to help them deal with the adverse effects of therapy and the stress of participating in a clinical study. This can assist patients in remaining on study and completing the experiment. For instance, the team might connect patients with a psychiatrist or social worker. The team might also supply patients with guidance on treatment side effects.

By using these solutions, clinical trials can reduce the time commitment and make it easier for patients to participate in clinical trials.

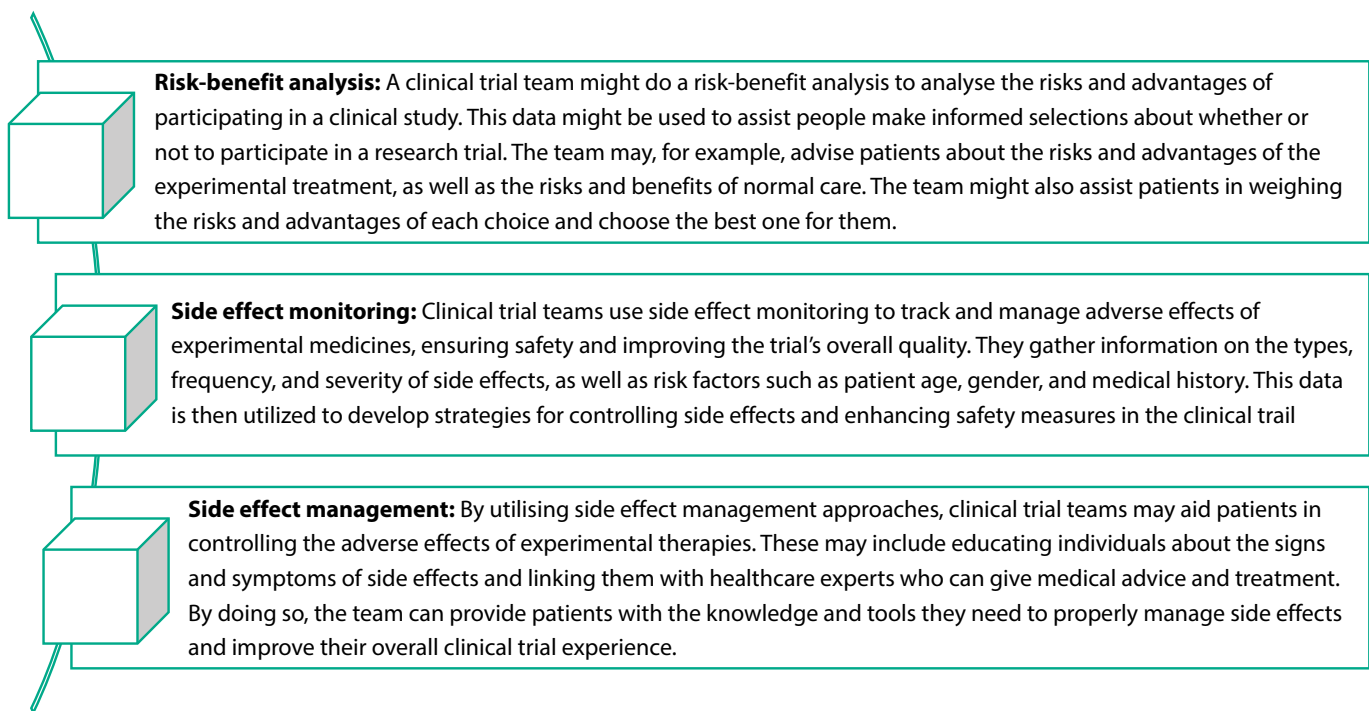| Lack of awareness | Inclusion criteria | Travel and cost | Time commitment | Side effects |

Side effects

Be transparent with patients about the risks and benefits of participating in your clinical trial. There are several analytical solutions that can be used to help with side effects. These include:

Risk-benefit analysis	Risk-benefit analysis can be used to compare the risks and benefits of participating in a clinical trial. This information can be used to help patients make informed decisions about whether or not to participate in a clinical trial.
Side effect monitoring	Side effect monitoring can be used to track the side effects of experimental treatments. This information can be used to identify and manage side effects and to improve the safety of clinical trials.
Side effect management	Side effect management can be used to help patients manage the side effects of experimental treatments. This can include providing patients with educational materials about side effects and connecting patients with healthcare providers who can help them manage side effects.

By using these analytical solutions, clinical trials can help to reduce the risks of side effects and make it easier for patients to participate in clinical trials.

Here are some specific examples of how these solutions can be used:

Risk-benefit analysis: A clinical trial team might do a risk-benefit analysis to analyse the risks and advantages of participating in a clinical study. This data might be used to assist people make informed selections about whether or not to participate in a research trial. The team may, for example, advise patients about the risks and advantages of the experimental treatment, as well as the risks and benefits of normal care. The team might also assist patients in weighing the risks and advantages of each choice and choose the best one for them.

Side effect monitoring: Clinical trial teams use side effect monitoring to track and manage adverse effects of experimental medicines, ensuring safety and improving the trial's overall quality. They gather information on the types, frequency, and severity of side effects, as well as risk factors such as patient age, gender, and medical history. This data is then utilized to develop strategies for controlling side effects and enhancing safety measures in the clinical trail

Side effect management: By utilising side effect management approaches, clinical trial teams may aid patients in controlling the adverse effects of experimental therapies. These may include educating individuals about the signs and symptoms of side effects and linking them with healthcare experts who can give medical advice and treatment. By doing so, the team can provide patients with the knowledge and tools they need to properly manage side effects and improve their overall clinical trial experience.

By using these solutions, clinical trials can help to reduce the risks of side effects and make it easier for patients to participate in clinical trials. And by following these tips, you can increase the chances of success in recruiting patients for your clinical trial.

Conclusion

Patient recruitment is a crucial part of clinical trials, but it can be difficult due to a variety of challenges. To make it easier for patients to participate in clinical trials, it is important to use analytical solutions such as educating patients and providers, making it easier to find clinical trials, providing financial assistance, and addressing patient concerns. By taking these steps, clinical trials can improve patient recruitment and make it easier for patients to access the latest treatments.

About the Authors

Anshuman Dubey

Senior Consultant – Infosys Consulting – Life Science | Data Transformation

Anshuman Dubey is an experienced Senior Business Consultant with over 16 years of expertise in data products, DataMart, data governance, data modeling and security, data visualization, and data consulting. He has a successful track record of implementing critical projects in various commercial and operational areas of the life sciences and healthcare industries. He is well-versed in both agile methodologies and waterfall methods and can collaborate effectively with cross-functional teams.

Viswanath (Vissi) Koppaka

Principal - Infosys Consulting - Life Sciences | Artificial Intelligence & Automation

Viswanath Koppaka has 21 years of analytics, life science, healthcare, business consulting, and leadership experience. An analytics leader leveraging a rare combination of strategic & complex program implementation with extensive Data Analytics, Business Intelligence & Digital Science knowledge. Provided end-to-end leadership to digital transformational and analytics initiatives – from strategy, requirements, definition, BI/analytics roadmap design, and solution design to implementation/governance and operations.

About the Contributor

Amit Thakkar

Associate Partner- Infosys Consulting - Life Sciences | Artificial Intelligence & Automation

Amit Thakkar is a business professional with more than 21 years of experience in analytics, business consulting, and data-driven decision support across 3 industries. He consulted with more than 25 Fortune companies across various business problems to design and implement analytical processes and methodologies. Helped multiple clients build analytics teams and infrastructure capabilities. Specific expertise in marketing, sales, merchandising, and supply chain analytics in pharmaceuticals, pharmacy, and retail verticals. Demonstrated a track record of building and running successful large global analytics teams.

References: -

- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4936073/
- https://www.patientcentra.com/patient-recruitment-insights/clinical-trials-awareness-problem
- https://healthcaresuccess.com/blog/healthcare-marketing/overcoming-clinical-trial-marketing-challenges-patient-recruitment-retention.html
- https://www.antidote.me/blog/10-clinical-trial-recruitment-strategies-that-work
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2878987/
- https://www.ohsu.edu/sites/default/files/2019-12/Forte_Patient_Recruitment_ebook_2017.pdf
- https://www.mosio.com/clinical-trial-cost-per-patient/
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6263122/
- https://healthtalk.org/clinical-trials/time-commitment-money-and-other-practical-issues
- https://www.languageconnections.com/patient-recruitment-in-clinical-trials/
- https://trialsjournal.biomedcentral.com/articles/10.1186/s13063-022-06144-9

For more information, contact askus@infosys.com

Infosys®

Navigate your next

Infosys.com | NYSE: INFY

Stay Connected