



FEATURED ARTICLE

USING THE FOUR PILLARS TO SUPPORT DATA-DRIVEN FEASIBILITY SUCCESS

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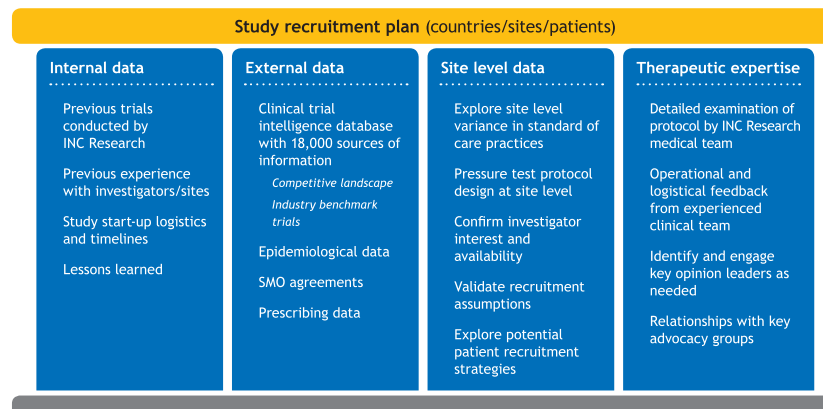
The challenges of clinical trial recruitment are well-known to drug developers. According to the Center for Information and Study on Clinical Research Participation, only about two percent of Americans participate in clinical trials each year, and eighty percent of trials are delayed because of enrollment challenges.¹

Yet while difficulties on the macro level are well-recognized, it is the micro-level details that ultimately determine the success or failure of enrollment efforts in each clinical trial. Is the protocol sufficiently attractive to doctors and patients? In what regions is the target disease incidence rising most rapidly?

Where is the clinical trial burden relative to the size of the population most favorable? Will patients in those target regions be able to meet the inclusion criteria? The answers to questions such as these are vital to create an accurate picture of how enrollment will progress in each individual trial.

That's where feasibility comes into play.

At INC Research, feasibility involves much more than just asking doctors how fast they'll be able to bring patients into a trial. Our research has shown the increasing complexity of protocol designs can make it difficult for doctors to accurately predict how quickly they can enroll patients. That's why we take a unique metrics-driven approach to feasibility based on what we call "the four pillars."



Pillar One: Internal Data Analysis

Clinical research organizations specialize in the conduct of clinical studies across Phase I through Phase IV for biopharmaceutical customers worldwide. As a plan for each clinical trial is established, the expertise relevant to that particular study, both from a therapeutic and regional perspective, must be considered. But assembling information is not as simple as checking items off of a list; the data must be analyzed, sorted and sifted to reveal trends and true intelligence.

INC Research has as part of its global team informatics experts and dedicated feasibility analysts who gather and analyze information for each feasibility exercise. They compile data on recruitment trends, both at the country level and across similar studies. They leverage past experiences with investigators and regulatory bodies. They collect information on more than 30 metrics - including screen failure rates, completion rates and quality measures - that can help predict the number of countries and sites needed for a successful trial, as well as the anticipated enrollment schedule. Our analysts then run best-case and worst-case scenarios, so the sponsor is fully educated about all possible outcomes. Finally, they identify emerging trends most likely to occur.

This process ensures customers have access to all of INC Research's considerable internal expertise. Yet we understand that feasibility is not a static process; it must evolve with the customer relationship. That's why INC Research revisits our analyses after a contract is awarded, combining intelligence gathered by our team with valuable insights from the sponsor, such as knowledge gained from previous trials with the compound. This merging of internal data from both sources establishes the most realistic assumptions for the trial.

Pillar Two: External Data Analysis

Each clinical trial is conducted within a dynamic landscape populated with competing trials, changing standards of care and other variables that can impact the study's success. To gain a holistic view of this landscape, INC Research leverages extensive external data analysis.

External factors we consider include competing trials that are currently recruiting patients, as well as those that already have patients locked in and those that could begin enrollment in the near future. The competitive landscape might also shift as new treatments are approved, which is why it is vital to monitor regulatory developments. Shifts in disease incidence, too, can affect enrollment, which is why INC Research includes epidemiologists on our feasibility team.

The gathering of external data, however, is only the beginning. The true value is added when the data are analyzed, which INC Research does by performing a SWOT analysis to identify all strengths, weaknesses, opportunities and threats that could impact a trial. We then work with the assigned clinical team to develop a plan that mitigates risks and maximizes potential benefits.

Pillar Three: Site Engagement

As a CRO known for strong therapeutic foresight, INC Research has a history of building and maintaining strong relationships with clinical investigators. We tap into this relationship network during feasibility exercises - not so much to gauge how quickly investigators expect to enroll patients in a trial, because as mentioned previously, we've found their estimates are often more optimistic than realistic - but to make sure the proposed trial design will resonate with doctors and patients.

Additionally, as a global CRO that has conducted trials or provided services in more than 100 countries, INC Research is able to communicate with investigators and regulatory bodies in their native tongues. This enhances our ability to capture any valuable nuances they may provide.

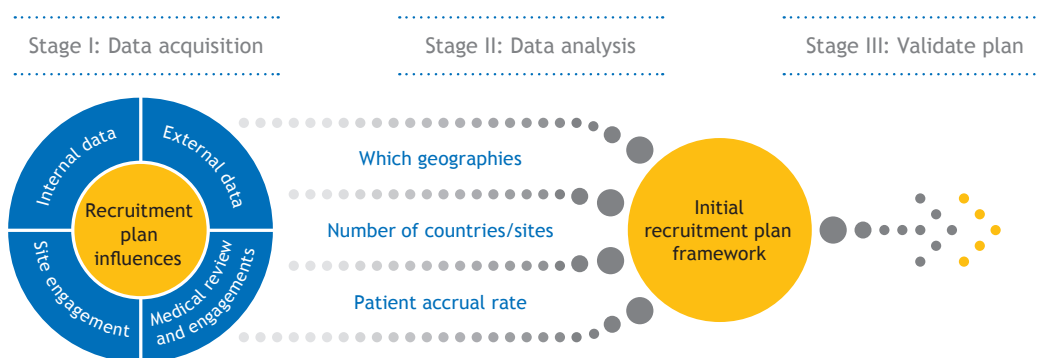
Another way INC Research has leveraged our investigator relationships to improve feasibility is through uniquely designed questionnaires. Our investigators told us they were frustrated by several CROs showing up on their doorsteps with time-consuming surveys every time a Request For Proposal (RFP) is sent for a new trial. We responded to their concerns by creating an advanced investigator database that retains information about each site and pre-populates INC Research questionnaires, saving the investigators time. Whatever additional information we do need to collect can be input and delivered online or via smart phone.

Pillar Four: Medical Review and Engagement

In addition to potential investigators, other external sources such as key opinion leaders (KOLs) and patient advocacy groups can provide valuable knowledge to feasibility exercises. These experts tend to have their finger on the pulse of various indications, adding both breadth and depth of expertise to the feasibility model.

At INC Research, every feasibility analysis is reviewed by physician-experts on our own clinical team. They can provide insight and advice on the proposed trial design as well as introductions to advocacy organizations when it is appropriate to build out the consultation network. The benefits of these relationships may even extend beyond the feasibility exercise: In one case, the relationship INC Research helped a sponsor build with a patient advocacy organization led the nonprofit to fund the sponsor’s next trial.

When it comes to KOLs, INC can tap into knowledge of both established leaders and emerging voices. Thanks to our global reach, we have relationships with future leaders in emerging markets like Serbia, Sri Lanka and the Czech Republic.



Maintaining Balance

The four pillars are not sequential steps, but rather a combination of proven strategies that support successful feasibility analyses and allow INC Research to accurately predict the path of a clinical trial. Without any one pillar, the overall feasibility exercise is weakened, but when all four are in place, sponsors can expect results that exceed their expectations and may even alter the planned approach for a study.

For example, INC Research previously conducted a feasibility study for a sponsor looking to run a gastrointestinal disease trial in the highly productive region of Central Eastern Europe. Our four pillars analysis revealed that the inclusion criteria for the study would have excluded about 90 percent of potential patients in that region. We were able to advise the sponsor on alternate locations to establish trial sites, and the study proceeded to hit its enrollment goals.

In another case, a company approached us regarding a rheumatoid arthritis study that was slated to enroll patients in the United States and Europe, as was typical for most RA trials at the time. But INC Research's analysis suggested competition in these regions was becoming a significant threat. Our analysis also showed that Latin America, due to its industrialization and the building of more factories, was becoming a hotbed for rheumatoid arthritis. The sponsor agreed to establish a clinical presence there, and the sites outpaced those in the United States and Europe in gaining the patients needed.

These insights come from INC Research's unique ability to gather and analyze information, making sense of often conflicting data and creating an objective rather than subjective picture of the proposed trial. It's a process we do for almost every trial we bid on, and it isn't a profit center; it's simply a benefit of working with INC Research.

About the Author

Jeff Zucker is senior director and global head of feasibility and patient recruitment for INC Research. He previously led global patient recruitment at Kendle, a leading CRO that INC Research acquired in July 2011. Prior to that Mr. Zucker led global trial optimization efforts for Merck & Co. He also has served as Director of Inpatient Operations at CRI Worldwide and as founder and President of Applied Research Trials, a biopharmaceutical consulting firm focused on improving clinical research trials and processes. Mr. Zucker has held leadership positions for Eli Lilly, Princeton Biomedical Research and multiple clinical investigative sites. He holds a Master of Science in Group Process and Group Psychotherapy from Hahnemann University in Philadelphia and a Bachelor of Science in psychology from Pennsylvania State University.

References

http://www.cisr.org/professional/facts_pat.html