

APPLIED CLINICAL TRIALS

Volume 18, Number 4 April 2009

INSIDE
An Outsourcing Necessity?

YOUR PEER-REVIEWED GUIDE TO GLOBAL CLINICAL TRIALS MANAGEMENT appliedclinicaltrialsonline.com



► **CRO/SPONSOR**

Comparative Trials Require Effective Drug Sourcing

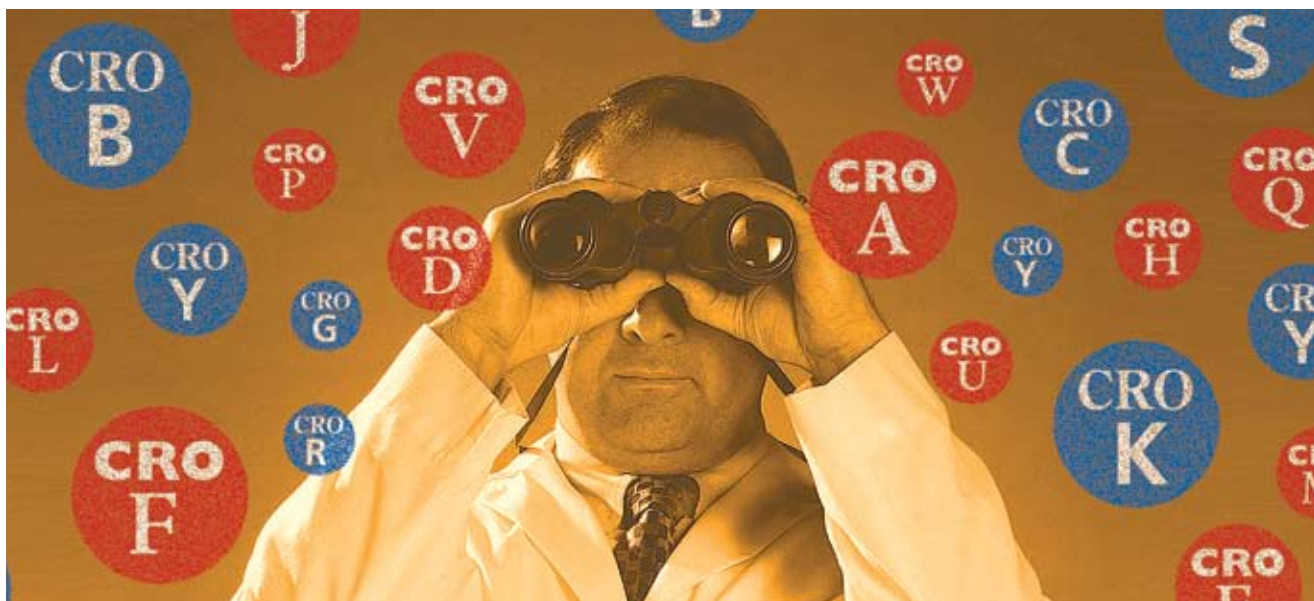
Selecting or Managing a CRO? How Sponsors Rate Themselves

Put the Success Back in EDC

Clinical Study Report (CSR) Mishaps

Also in this issue

- Privacy Still Looms Large for Health IT
- EU's View of Rare Diseases
- Real World Drug Safety
- Do We Need a Comprehensive Feasibility Strategy?



PHOTOGRAPHY: STEPHEN E. MUNZ ILLUSTRATION: PAUL A. BELCI

Harold E. Glass and Daniel P. Beaudry

CRO Selection & Management

Study reveals how sponsors rate their own outsourcing abilities compared to other companies.

The use of CROs, an expanding multibillion dollar business, is expected to continue its growth in the coming years.¹ And since overall R&D costs and productivity represent one of the most pressing issues industry leaders face today,² outsourcing will almost certainly continue to play a major role in drug development.

The University of the Sciences in Philadelphia (USP) and TTC Ilc are conducting a multiyear research program on the factors associated with improving the speed and cost effectiveness of clinical studies, including the role of outsourcing.

Our research study includes a Web-based survey of sponsor pharmaceutical companies and CROs in a range of areas, from how CROs are used to the process of selecting and managing a

CRO. Other papers in this project have addressed a number of these CRO-related topics.^{1,3}

In this study, participants identified two related, yet distinct, outsourcing management areas: selecting a CRO and managing a CRO.

We found that a company that considers itself as performing well in managing a CRO tends to believe that it is good in the previous step of selecting a CRO. Similarly, companies skilled at CRO selection also consider themselves to be especially competent in the management processes that lead up to selecting a CRO, such as using a common bid grid. However, the reverse does not hold true. Respondents in companies that consider themselves effective in selecting CROs do not necessarily assert that they are adept at the subsequent step of managing a CRO.

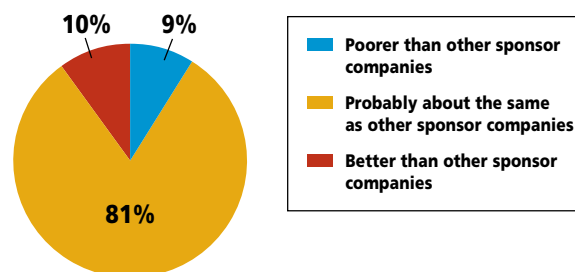
Managing outsourcing involves many areas and processes. This study examined four key outsourcing-related activities: annual budgeting, the use of bid-grids, CRO selection, and the management of outsourced projects.

Budgeting outsourced studies

The annual budget sets the operational parameters for almost every organization. Tracking



Comparison of Budgeting Skills



Source: University of the Sciences in Philadelphia and TTC, llc

Figure 1. How sponsors rated their ability to budget for outsourcing compared to other sponsors.

and understanding operational variances from budgeted numbers is a demanding task, both for those who collect the numbers and for those who make decisions based upon those numbers.

Yet few sponsor company participants in this study thought their ability to budget annually for outsourced studies was more effective than their counterparts' in other companies. But even fewer considered their company less effective than competitors in the budgeting process (see Figure 1).

As one senior outsourcing manager put it: "Budgeting is something we need to get right, but often do not. Many times, though, it is really because the scope of the project changed, and no company will ever be able to anticipate all the changes. We could still do a better job of budgeting...particularly because no one likes having to go back for more money."

Areas of Outsourcing

AREA	DEFINITION
Preferred Providers	A smaller group of CROs that have first preference on studies, and for which a rate card has been developed.
Full-Service Providers for Individual Projects	The CRO assumes responsibility for all outsourced aspects of an individual clinical trial.
Functional Providers	The CRO takes responsibility for a functional area, such as data management, across most or all clinical trials.
Single Area Outsourcing	A provider takes responsibility for a particular aspect, for example biostatistics, of an individual clinical trial.
Insourcing	The sponsor company contracts for individuals to perform certain activities, such as monitoring.

Source: University of the Sciences in Philadelphia and TTC, llc

Table 1. The different ways sponsors outsource to CROs today and what each of the five methods entail.

Selecting a CRO

There is a large variation in the way study participants evaluated their company's ability to select CROs, a greater variation than we found in their responses to the use of budget and bid grids. Although most participants felt that their company was similar to others in its ability to select a CRO, a third of those surveyed thought their company was better than other companies in selecting a CRO. At the other end of the spectrum, fewer than one in 10 considered their company to be ineffective in selecting a CRO.

Apparently, the ability to effectively select a CRO is not concentrated in any particular pharma company, whether large or small, or limited to a particular geographic area.

In addition, companies who consider CRO selection a competitive strength do not outsource an appreciably greater percentage of clinical development work. Moreover, these companies use CROs in much the same way: as preferred providers, full service providers, functional providers, single area outsourcing, or insourcing (see Table 1).

Both sponsor company and CRO participants evaluated the importance of the set criteria many pharma companies use in selecting a CRO. Generally, while all participants strongly agreed on the selection criteria, some thought particular criteria were more important, while a smaller number of respondents cited very specific criteria as being most important.

CRO selection criteria deemed most important were: the team's general sense they can work with the CRO, and a project management team devoted to the study. The criteria judged least important included: CRO invoicing/billing processes, and being one of the largest 20 CROs.

Overall, companies that consider themselves better at

selecting CROs generally use the same selection criteria as companies who do not consider themselves as adept at it. Still, depending on the type of company surveyed, there were important differences for a few of the selection criteria.

For example, larger sponsor companies emphasize a CRO's size and geographic capabilities more than smaller companies. American pharmaceuticals value the mechanics of issue identification and resolution more than their European counterparts. Examples of these mechanics include a CRO's willingness to accept penalty clauses for poor performance, and an established process within a CRO to bring project problems to the attention of senior CRO managers.

American participants were also likely to stress the detailed opera-

Operating Dimensions used to Evaluate CROs

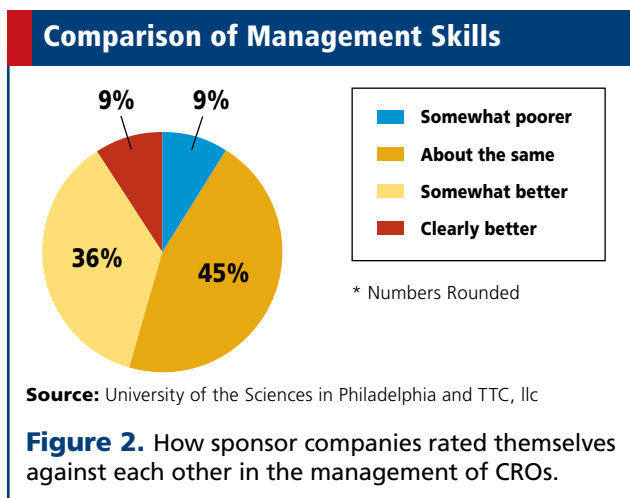
- A solid partnership between sponsor company and CRO will do much to improve the success of a project.
- Good CROs have profits similar to established pharmaceutical companies, and sometimes even better.
- Because of the way CROs charge, it is often in a CRO's interest to expend more labor, rather than less, to accomplish a task.
- It costs more to do a study with a CRO than in-house.
- The sponsor is usually the source of communication breakdowns.
- CROs are too often more concerned about getting the next project than doing the current one well.
- CROs spend more on individual clinical grants with investigators than sponsors do.
- It pays in a project to monitor even the best CRO closely.
- For a CRO, everything is a change of scope.

tional components of the CRO's approach. A case in point is the project execution plan the CRO presents in the bidding process, including items such as resources, country, and site selection.

Managing CROs

Respondents located in Europe, or from smaller companies, felt they were somewhat or clearly better than other companies in managing CROs. More Europeans than Americans (52% vs 31%) believed their company was better than others in managing CROs. Smaller pharmaceutical company respondents were more likely than survey participants from the largest 20 companies (54% vs 40%) to think they were better than others in managing CROs (see Figure 2).

The European sense of being better at managing CROs may come from how they view CROs in total, and how their views differ from the American perception of CROs.



For example, European participants are less severe in the evaluation of CROs on a series of operating dimensions (see sidebar). They were more likely to give CROs the benefit of the doubt in a range of areas such as communication problems, motives, and commitment to quality work.

Americans and participants from larger companies were more likely to question CROs than were Europeans and respondents from smaller sponsor companies. Americans, especially in larger companies, often thought that the CRO would be more focused on getting the next project than performing well on the current project.

Americans were also less likely to concede that the sponsor may often be the source of the communication problems on an outsourced project. And Americans were more prone to think it is more expensive to do work with a CRO than to perform the same work internally.

Pharma company participants in this study report that, on average, their companies spend 27% of total CRO expenses on overseeing CRO projects. And there is no statistically significant difference between the better and poorer managers of outsourced work in the amount they spend on oversight.

Nor are the companies who consider themselves better at managing CROs more likely to use fixed price contracts; they used fixed priced arrangements for 39% of their CRO contracts compared to 38% for the other companies.

Similarly, there are no significant differences in the average amount of final budget variance due to scope changes (14% and 16%), or variance due to factors outside of changes in scope (12% and 11%).

Selection and management ability

Companies that consider themselves better at selecting CROs also view themselves as better at major activities immediately prior to the final selection of a CRO.

These companies are better at annual outsourced budgeting and use a better bid grid. They also use CROs with some slight variations: They make greater use of insourcing and draw less on full service providers.

Study participants from clinical operations and contract management/finance rated their companies slightly higher on selecting CROs than did individuals from other corporate areas. This is likely due to the fact that they are more directly involved in areas related to selecting a CRO, such as using bid grids and annual outsourcing budgeting. However, in the final model a respondent's functional area was not significant.

Respondents who consider their companies to be better at managing CROs are more likely to come from smaller pharmaceutical companies, be located in Europe, and

Survey & Statistics Methodology

The survey included 419 people from 116 companies: 70% from pharmaceutical sponsor companies and 30% from CROs. More than half of the participants from sponsor companies (53%) were employed by one of the largest 20 companies, while 29% of CRO participants worked for one of the largest 20 CROs. European-based respondents comprised 45% of the sample. American-based respondents represented another 40%, with the remaining 15% from other countries. Both sponsor and CRO survey participants averaged 13 years of pharmaceutical industry experience.

The study sought the opinions of pharmaceutical company personnel involved in outsourcing. Participants included outsourcing managers, finance personnel, clinical operations and project management staff, and senior development managers.

Differences highlighted in the responses by a particular subgroup (e.g., one of the largest 20 pharma companies or a smaller company) are statistically significant at the .05 level or stronger. Depending on the specific types of data used, the analysis makes use of a number of statistical techniques, ranging from analysis of variance (ANOVA), Chi Square, and Gamma. The analysis also uses a multivariate statistic for categorical data, binomial logistic regression. Binomial (or binary) logistic regression is a form of regression used when the dependent variable is categorical and the independent variables are either categorical or interval.^{4,5}

perceive themselves as better at selecting CROs. Additionally, they see their use of preferred providers declining over time.

Both groups—those who do and do not think they are better at managing CROs—share similar attitudes about how CROs operate and how the sponsor company should interact with the CRO. These shared attitudes include:

- The importance of a working partnership between a CRO and the sponsor company
- The extent to which a sponsor company must closely monitor the details of a CRO's performance
- The belief that CROs look for every way to increase billing on a given project, even at the expense of quality.

However, the self-identified "better managers" of CROs tend to take a broader view of communication problems in outsourced projects. These better performers are more willing to acknowledge that communication problems are likely to originate with the sponsor company. Companies that

are better at managing CROs also think they are better at selecting a CRO. But they do not necessarily think they are better at budgeting or using better-quality bid grids.

Project managers and individuals in clinical operations are more positive in their views of how their companies manage CROs. But, once again, functional area did not appear as a statistically significant variable.

Clearly, individuals may think their company is particularly good at the steps involved in outsourcing, but generally respondents—regardless of their functional area—identified two key decision loci: CRO selection and CRO management.

Considerations

Every company must critically evaluate itself on the individual dimensions it considers critical in managing outsourcing and develop steps to bring its actual practice into line with expectations. This process can include tools and information to better manage budgeting, the RFP process, and bid grids, and to better select and manage CROs.

The survey demonstrates that two distinct management areas exist: CRO selection and CRO management. This is not especially surprising. What is noteworthy is that companies that consider themselves good at managing CROs often think they are good at selecting CROs, although the reverse does not hold true. And for companies good at managing CROs, the link back to budgeting may not necessarily be strong. Good budgeting is associated with good CRO selection but not always with good CRO management.

The study concludes that most individuals in pharmaceutical companies do not generally think their companies are better than others in three key outsourcing components: budgeting, selecting, and managing CROs. But depending on the specific functional area, people in some companies do think they are superior.

References

1. H. Glass and D. Beaudry, "The Key Factors in CRO Selection," *Applied Clinical Trials*, April 2008, 52-60.
2. H. Glass and L. Poli, "Connecting the Dots," *Pharmaceutical Executive*, January 2007, 56-58.
3. H. Glass, "Outlook for Outsourcing," *Good Clinical Practice Journal*, 21-24, (November 2007).

Harold E. Glass,* PhD, is professor of Health Policy at the University of the Sciences in Philadelphia (USP) and is managing director at TTC llc, email: h.glass@usip.edu. **Daniel P. Beaudry, MBA**, is associate director of business development at TTC llc, 4548 Market Street Suite M-20, Philadelphia, PA 19139.

*To whom all correspondence should be addressed.

Harold E. Glass and Daniel P. Beaudry

Online Exclusive April 14, 2009

An Outsourcing Necessity?

April's "CRO Selection and Management," presents and discusses information gathered from a survey conducted by the University of Sciences in Philadelphia (USP) and TTC llc, which questioned clinical trials professionals on topics of outsourcing management. The following article uncovers respondents' perceptions and experiences of the use of bid grids in the process of selecting a CRO as a partner.

Use of Bid Grids

Many companies put extensive effort into constructing bid grids that guide them in budgeting and selecting CROs. Bid grids, in various configurations and levels of detail, are the forms sent by pharmaceutical companies to CROs detailing the activities expected of the successful CRO to complete the study being bid. During the budgeting process, a refined bid grid enables a company to establish both the overall outsourcing budget and the expected budget for individual major outsourced studies. The bid grid also enables companies working with preferred providers to project costs for individual projects more easily. A carefully crafted bid grid can also smooth the progress of CRO bidding for competitive projects. By using a common bid grid for all the CRO competitors, the sponsor company enhances its ability to compare the bid costs and assumptions of one CRO with another CRO's costs and assumptions.

Nearly two-thirds of the survey participants indicated that their company uses a common bid grid across all projects, although few think their bid grid is any better than those other companies use.

While many participants report using a common bid grid, certain types of sponsor companies are especially likely to use one. Ninety (90) percent of the American participants report using a common bid grid, in contrast to just over half, fifty-two (52) percent of locations

worldwide. Bid grids are also associated with company size, with eighty-one (81) percent of the participants from the largest pharmaceutical companies reporting its use, compared to half (49%) of the study participants from smaller companies who reported employing a common bid grid. Using bid grids is becoming a standard for many pharmaceutical companies, especially for U.S. operations, although few sponsor companies think their particular bid grids provide much of a competitive advantage.

CROs frequently find sponsor-company bid grids confusing and time consuming. As one CRO business development manager explained: "Some bid grids are very detailed, many are not. And every company has to have their own bid grid. It is one thing for us to have to spend so much time filling out different bid grids for each company. It is another for so many companies to work with incomplete, overlapping, or downright confusing bid grids."

CROs generally have a negative view of how sponsor companies use bid grids. Less than a third (31%) of CRO respondents find the bid grids clear and useful, with virtually no difference in that assessment based on the CRO's size or location.

Bid Grid Use Perception

Which of the following statements best characterizes the use of a Bid Grid by your company in the CRO selection process?

	Percent
We do not use common Bid Grid across all our projects.	32
We generally use a common Bid Grid, which is most likely poorer than other sponsor companies.	3
We generally use a common Bid Grid, which is probably no better or worse than other sponsor companies.	51
We generally use a common Bid Grid, which is better than other sponsor companies.	14

By Harold E. Glass, PhD, Professor of Health Policy, University of the Sciences in Philadelphia (USP) and Managing Director TTC llc; and Daniel P. Beaudry, MBA, Associate Director Business Development TTC llc.*