The pressure is on in-house R&D organizations to deliver, but those who best manage their outside partners gain the competitive edge.

by Gary Tyson and Tim Dietlin

Outsourcing has an entrenched role in clinical development. In a recent survey by Campbell Alliance clinical development professionals, 37 leading pharma and biotech companies reported that 70 percent of their studies had at least some component outsourced. (See “On the Survey”.) Without exception, interviewees anticipated increased use of contract research organizations (CROs) for the foreseeable future. And sponsors expect a single CRO to handle a broader scope of activities: In the survey, three-quarters of fully outsourced studies were delegated to a single, full-service vendor.

Outsourcing may be well established, but companies haven’t yet learned how to manage the process to realize all of its potential benefits. Respondents reported that 50 percent of their outsourced studies go over budget, citing such factors as difficulty recruiting patients and the need to replace underperforming study sites. Almost half of respondents said that they need to improve their CRO management skills significantly, and fewer than one-third said their companies have standard CRO management processes and tools in place. Seventy percent, however, have brought a measure of standardization to the preliminary stages of vendor relationships by establishing a centralized sourcing group to manage CRO selection and contracting.

Fifty-five percent of survey respondents have established “preferred partnerships” with a limited number of CROs. These partnerships aim to increase the quality and efficiency of outsourced trials, but for most respondents, there was no discernable difference in performance between studies conducted by partner CROs and those conducted by non-partner CROs, where performance is defined as achieving results within timeline and budget. This suggests that partnership—at least as currently practiced—may not be providing added value.

Manage Relationships
Clinical development organizations within pharmaceutical and biotechnology companies have traditionally focused on managing and executing internal studies. Most successful study managers earned that position by having detailed control and knowledge of their in-house studies, and most senior managers have risen through a hierarchy that values hands-on control. Outsourcing, however requires a new core competency in managing vendor relationships, competency that goes
beyond traditional study management to embrace vendor selection, contract-
ing, and risk management.

To realize the benefit of outsourcing, organizations need to find a way to de-
 deliver excellent results without relying in the micromanagement level of control associated with internally managed studies. The survey indicates that few pharmaceutical or biotech companies have effectively bridged that gap. Campbell Alliance’s experience has shown that clinical development groups can best manage CRO relationships by clarifying and standardizing every step of the outsourcing process. Without standards, study managers run the risk of defaulting back into the microman-
agement behavior that has served them well for in-house studies but fails to capitalize on much of the value a CRO can bring to the table.

Today, many companies outsource trials based on short-term resource need rather than a coherent long-term strategy. To make outsourcing effective, organi-
izations need to start with an outsourcing strategy. Given the length of the clinical development process, an effective outsourcing strategy looks out three to five years. It should include
- a clear definition of the organization’s therapeutic priorities
- an analysis of the product pipeline by therapeutic area to determine likely type and volume of studies, including the likely countries within which the studies will be conducted
- potential in-licensing and out-
licensing opportunities for products by therapeutic area
- an analysis of the likely countries within which the studies will be conducted
- a frank assessment of current in-
house clinical expertise, including
- an estimate of likely retention levels
- an organizational plan based on planned studies that specifies what types of skills are needed in-house or from the CRO and roughly how many of what kind of staff will be needed
- a set of recommendations on what key criteria should be used to deter-
mine whether to outsource, includ-
ing therapeutic area, number of countries within which the study is being conducted, and size.
The outsourcing strategy defines how the organization will leverage CROs and other vendors. It needs to be revisited each year to accommodate changes in the operating environment. Once a company develops an outsourcing strategy, it must enforce it rigorously. Although exceptions to the strategy may be made, a substantial burden of proof should rest on the person advocat-
ing outsourcing of a study that does not satisfy agreed-upon criteria.

Get It in Writing
While vendor selection and contracting usually involve input and action by a sourcing or procurement group, it is critical to establish a clear work stream and a communications protocol for interactions between the sourcing group and clinical development. (See “Stakeholders’ Decision”.) Organizations that do not clearly define the roles and responsibilities of all parties involved can add weeks or months to the CRO selection process.

Since many CROs are unwilling to initiate study work with only a letter of intent, the contracting process has become a major bottleneck in the rapid execution of studies. For that reason, as

### Stakeholders’ Decision

One key to successful outsourcing is vendor selection. This process should be a cross-functional one in which all key stakeholders from both the commercial and clinical sides articulate their concerns. Vendor selection criteria should include both general performance indicators and study-specific considerations. For example:

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<tr>
<th>GENERAL PERFORMANCE INDICATORS</th>
<th>STUDY-SPECIFIC CONSIDERATIONS</th>
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<tbody>
<tr>
<td>» staff size, qualifications, turnover rate at the CRO</td>
<td>» number of studies managed in the last 24 months in the therapeutic area</td>
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<tr>
<td>» CRO financial viability</td>
<td>» number of sites supported in the therapeutic area in the last two studies</td>
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<tr>
<td>» record of achieving patient recruitment targets</td>
<td>» familiarity of staff with the specific disease state</td>
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<td>» quality record</td>
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The new core competencies of R&D leaders—skilled vendor selection and management.

### On the Survey

Campbell Alliance surveyed clinical development professionals at 37 leading pharmaceutical and biotech companies to identify trends in the management of contract research organizations (CROs). The 95 survey respondents ranged from study managers to vice-presidents for clinical operations and represented a broad range of companies including AstraZeneca, Pfizer, Abbott Laboratories, Amgen, TAP, Novo Nordisk, Millennium, and Merck.
well as the desire for pricing and staffing concessions, it is worthwhile to establish preferred-vendor relationships with select CROs. These vendors should have relevant specialized expertise or a track record of working effectively with the sponsor’s clinical development group. As the survey indicates, these relationships are no guarantee of better performance, they can reduce the contracting time through the use of master service agreements (MSAs). The specific terms of the contract will depend in part on the goals the sponsor is trying to achieve:

**Performance.** If the goal is to improve study performance and reduce costs, sponsors should

» gain agreement not only on the legal language of the MSA, but also on the standard language on the specific activity agreements needed for each study

» negotiate for control or recourse in the case of staff changes during the course of the study, including the data collection and management phases, which are often excluded in contracts

» agree on general ranges of hourly rates, taking into account reasonable factors for increase, such as inflation and staff expertise level

» agree in principle on the use of milestones (where reasonable) and the ability to tie at least some payments to milestones

» agree in principle on the use of bonuses and penalties.

**Control.** If the goal is to minimize delays and cost overruns, the sponsor should

» agree on a set of specific project milestones and a payment structure tied to them

» negotiate non-timeline related metrics, including the number of patients recruited and the number of sites initiated

» determine the exact bonus/penalty approach that works for the specific study

» agree on the specific staffing and process for staff change-out.

**Collaboration.** When a goal is to facilitate effective collaboration between the CRO and the sponsor’s staff, the sponsor should

» gain agreement up front for vendor support of the internal reporting

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**Traveling Light**

**A RAPIDLY GROWING PHARMA COMPANY** has made extensive outsourcing of clinical development efforts a key component of its business model. Shire Pharmaceuticals—which realized more than $1.2 billion in 2003 revenues—has only 1,700 employees worldwide. Shire’s ability to establish high-value CRO partnerships is a critical factor in its success.

In 2003, Shire spent more than $100 million on clinical trials and 95 percent of its clinical development efforts were outsourced. Today, the company is confident that its CRO partners can meet aggressive timelines without sacrificing quality.

It began in the spring of 2002 when Shire clinical development leaders recognized an opportunity to improve outsourcing relationships. First, the company pared down the number of CROs it used to a handful of preferred, full-service partners. It used rigorous criteria to identify the best partners, including demonstrated ability to manage large global studies in Shire’s key therapeutic areas while maintaining a high level of quality and customer service.

Once preferred CRO partners were selected, the next challenge was to provide clinical development personnel with more efficient means of managing those relationships. The solution: a web-based outsourcing tool. The powerful tool provides a graphical representation of each step in the clinical trial process. All relevant materials to support each step are available from an RFP template to a copy of the actual protocol. Organized in a very logical fashion, the site takes a user—in step-by-step fashion—from developing the highest-level strategic plan for undertaking multiple studies down to the day-to-day activities of getting an individual study done.

The website serves as a process management tool, in that it has the steps everyone needs to follow, as well as a knowledge repository. This brings together the best practices from all over the company and puts them in a central place.

Since implementing the new system, Shire has dramatically improved the efficiency with which it evaluates, selects, and manages its clinical development vendors. Shire and its partners have established the close working relationships and standardized practices necessary to produce consistent excellence in clinical trials outsourcing.
structure must be sufficiently robust to within clinical development and to streamlined, with relatively few layers, manage these relationships should be among various stakeholders and clinical development. As a result, many project managers spend a tremendous amount of time and money working with CROs to develop a series of overlapping ad hoc reports. Ideally, the project manager should establish a clear status-reporting process using standard reports and tools. That way, CROs can generate sufficient data in a form suitable for sharing with internal stakeholders with a minimum of internal rework.

The tools needed to support these processes can take many forms. (See “Traveling Light.”) The key is that they be clearly documented, easily accessed and understood, and consistently used by sponsor personnel. Additionally, the effectiveness of processes and tools needs to be consistently measured to ensure they are enhancing the value of CRO relationships. Metrics should include basic study execution metrics such as recruitment versus projection, costs versus budget, actual versus projected timeline. They should also include vendor performance metrics based on key contract terms and the number of contract extensions or exceptions needed.

Clinical development in pharma is going through a major evolution. Fully in-house studies—the kind that taught most clinical development leaders their craft—are becoming increasingly rare. At least part of most studies are being outsourced. Moving from study execution to vendor management is a struggle for many organizations. But clinical development groups that master this skill set will have a competitive advantage for the near future.

Gary Tyson is vice president and Tim Dietlin is a director in the clinical development practice of Campbell Alliance, in Raleigh, North Carolina. They can be reached at (919) 844-7100.