

Realizing Drug Discovery Strategies Through Improved Collaboration

Collaboration is vital for success in the drug discovery process. It is both a business strategy and a tool that supports more effective communication and coordination. It is critical to breaking through the traditional silos within pharma enterprises. It's also vital to optimizing the growing array of external partnerships being created to improve the drug discovery process such as those with academic institutions, other pharmaceutical companies, venture-backed biotechs, and private research institutes.

Leaders of strategic collaborations of all types must manage and motivate teams of specialists with different perspectives and insights, agendas, and cultures, and lead them effectively through difficult, innovative work to a common goal. The challenges to successful leadership are further amplified by the inevitable differences between the missions, processes, incentives, and cultures of the institutions that are parties to collaborations. Such differences obstruct knowledge-sharing and impede decision-making, weakening productivity and significantly impairing the goal of breakthrough drug discovery. Collaboration skills and structures are key to unlocking the potential of these relationships.

CFAR offers pharmaceutical organizations several data-based tools that help pharmaceutical leaders optimize the collaborations they have formed to improve the drug discovery

process. We combine analytic expertise with a deep understanding of human behavior, applying both through integrated proprietary methods that engage the interests of diverse, high-performing professionals and support sustainable, measurable yield from collaborative efforts. We have worked with large, global organizations seeking to improve internal collaboration, build partnerships with external organizations, strengthen leadership teams, and tap into new sources of scientific research that will help spur innovation in their drug development process.

Decision Charting: clarifying authority to improve the discovery process

Decision Charting—a rigorous tool that integrates both quantitative and qualitative data—helps a team, organization, or collaborative

partnership identify where there is ambiguity around roles and decision-making, and to negotiate differences in the allocation of responsibilities among key stakeholders and parts of a team. The tool can be applied to discrete decisions or tasks, and also to continuous, evaluative processes. It is especially effective in the characteristically matrixed environments in the pharmaceutical industry, where influence and authority can flow in multiple directions and where the working relationships across roles are crucial to the performance of the enterprise or collaborative partnership. The tool's precise, three-phase process provides a common language for effective dialogue and delegation, building higher performing teams of participants focused on tasks, not on the personalities, involved in decision-making.

| | | Stakeholders | | | |
|-----------|--|--------------|-------|-----|-----|
| Decisions | | Owners | Board | CEO | CFO |
| 1 | Distribute cash to shareholders at end of year | A | C | I | C |
| 2 | Hire/fire family member in an executive position | A | I | R | C |
| 3 | Open a manufacturing plant in Singapore | C | C | A | C |

Organizational network analysis: pinpointing the barriers to collaboration

CFAR knows that the better the integration—between units, across an organization, and between enterprises—the better the output. This is particularly true of organizations collaborating on drug discovery, which requires individual team members simultaneously to challenge and support one another through creative, collective risk sharing; to challenge and redefine scientific processes, methodologies and standards; to communicate optimally and work effectively across functional and organizational boundaries. Yet sometimes it is difficult to ascertain what the barriers are to that degree of effective collaboration. CFAR's Organizational Network Analysis tool helps clients rigorously pinpoint where collaboration is working and where it isn't. CFAR's ONA tool allows leaders to identify where and how team cohesion is lacking and identify the steps for improving it. The tool also allows leaders to closely measure improvement along the way.

Leadership development

Collaborations in the drug discovery process demand new kinds of proficiency from leaders. CFAR supports pharmaceutical executives looking for the skills to lead their organizations to new business and operating models, to manage new business units and complex functional teams, and to develop their high potential staff.

Action Learning: learning by doing

Research has shown that organizational learning is most effective through action, and that action without learning and reflection impedes the development of people and organizations. CFAR's approach to Action Learning—which we helped develop while still a research center within the Wharton School at the University of Pennsylvania—builds organizational capabilities by uniting analysis and action, reflection and doing, change management, and bottom line performance. CFAR applies its action learning expertise to real business issues that are relevant

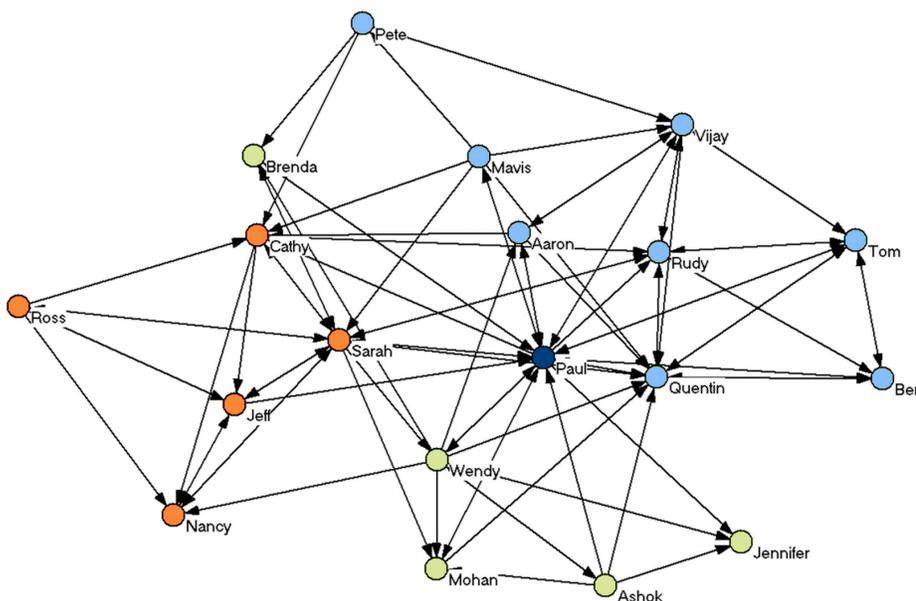
to the strategy and current needs of the organization. The results are expanded leadership capacity and the ability to drive to results in new ways—essential for leaders navigating the increasingly complex, global pharmaceutical environment.

Influence and persuasion: skills to support collaborative success

CFAR also helps pharmaceutical leaders improve communication and relationship-building skills. It has been demonstrated that those with the skills to build "social capital" across silos are better performers. CFAR offers a customized workshop about influence and persuasion that helps participants understand their natural persuasion styles including biases and inclinations in conflict situations, the communications culture of their organization, common barriers to communication, and ways to develop more effective influence skills. Several practical assessment tools are used during the workshop to help participants identify optimal approaches for improved cross-functional communication and information sharing. Leaders who need to generate enthusiasm for a new idea, managers who need to focus their teams, and front-line staff who work directly with customers have all benefited from CFAR's work in this arena.

Backcasting: overcoming obstacles to effective collaboration

Backcasting is a CFAR tool that focuses on a highly specific goal. It maps and sequences both the obstacles to attaining that goal, and the accomplishments needed to overcome each. When conducted at the beginning of an effort—especially a large, complex effort involving multiple players—Backcasting prevents hasty

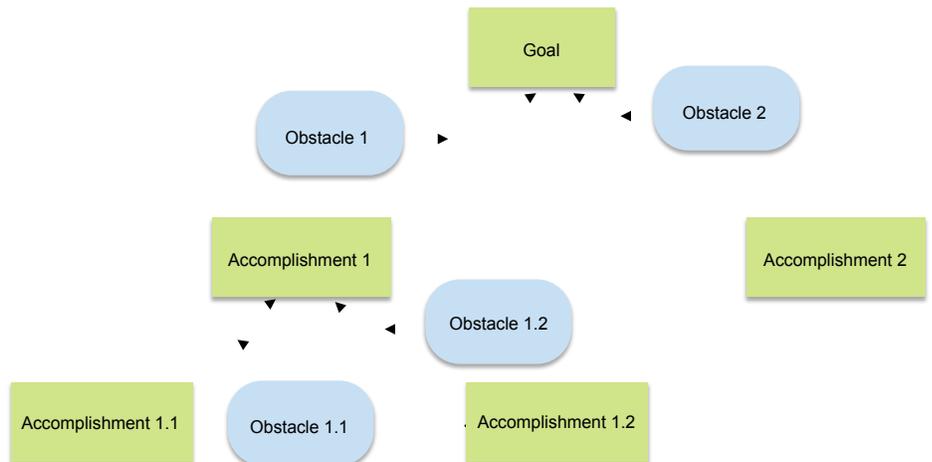


decision-making, and “wishful thinking,” and creates a realistic picture of the resources and time needed to reach a goal. However, Backcasting can also be particularly powerful when applied in projects that are well underway, but hit a “stuck point” that threatens the achievement of the ultimate goal. In that context, Backcasting effectively circumvents recriminations and pull back, and reengages productive dialogue and problem solving.

Cases

Maximizing value across strategic partnerships.

CFAR is working with the chief medical officer of a global pharmaceutical organization to look strategically at the company’s relationships with academic medical centers and medical professional societies. The objective of the project is to identify ways to optimize these organizational relationships relative to basic research, clinical research and trials, scientific information exchange, marketing, and educational curricula and programming. CFAR began the assessment by interviewing leaders inside the organization as well as a large number of the company’s strategic partners to identify the interests of both sides in the value of collaborative activities. CFAR interviewed leaders within the organization in areas including research, strategy, licensing, marketing, scientific advisory relationships, and legal and regulatory compliance. For the external component, CFAR interviewed deans of academic medical centers, scientific researchers, leaders of several professional societies, and subject matter experts in relevant scientific disciplines. When the project is complete, CFAR will provide the pharmaceutical organization with a set of explicit recommendations on how to



A Backcast helps reveal a casual structure of obstacles and accomplishments that gives us a relatively complete and coherent picture of the network of conditions we need to achieve a desired goal.

prioritize their collaborative activities with external partners, as well as guidelines on how to optimize their investments in strategic partnerships.

Harnessing the power of a joint venture

In this project, two pharmaceutical companies entered a joint venture to link their different capabilities so they could expand product lines and improve speed to market, but discovered that there were as many forces pushing them apart as pulling them together. Cultural differences—in how people work together, hold meetings, make decisions, push innovation—led to mistrust and confusion, and the new venture lacked an adequate governance structure to work through conflicts between people with different interests. In addition, the skills exercised by the leader at the birth of the joint venture were not those needed to fully harness the two companies’ capabilities in the newly-created organization. CFAR worked with the new leadership to develop new governance rules to resolve disputes. CFAR also helped the organization design ways to make critical decisions and choices, and

develop negotiating skills to move beyond compromise and achieve to meet its primary goal of increasing innovative solutions. Resolution of these issues allowed the joint venture to meet its primary goal of increasing speed to market of the products it was created to develop, and to gain first-mover advantage in switching from prescription to generic drugs.

Clarifying decision authority to improve performance

A challenge pharmaceutical executives face is helping professionals from different divisions or disciplines work together in ways that advance the interests of the firm as a whole. Complex choices can arise that are less about a division of labor than a “division of influence.” For example, a firm may be about to launch a phase one trial, only to learn that a competitor is working on a similar drug—should they accelerate development, or shut it down? The issue is not about the work process—where the main concerns are about efficiencies, errors, and workflow—but about who has the authority to manage risk by making key strategic decisions.

In this project, a pharmaceutical company had created a matrix organization in one of its units specifically to provide a structure for such decisions. But members of the unit were confused about their roles, a gridlock in decision-making had developed, and hoped-for efficiencies of shared information and responsibility were not being realized. The client asked CFAR to help members engage more fully in the matrix infrastructure. CFAR interviewed team members to surface each person's view of their own role and their assumptions about other team members' roles and responsibilities—and compared these assumptions to actual practice. CFAR and the client then identified a set of strategic decisions the unit would be likely to face—such as accelerating a development program, outsourcing data analysis, selecting a country for a clinical trial, or prioritizing options for life-cycle management within a fixed budget. Using CFAR's Decision-Charting tool to analyze these situations, CFAR was able to show where and how decision-making was blocked. This set the stage for thoughtful negotiations among the executives about their decision-making process, and team members were equipped with the necessary structures and skills for new behaviors.

Aligning structure with task

For this global pharmaceutical company, CFAR worked with the leader of their business information and research division to reorganize the division so that the structure was more tightly aligned with its objectives. CFAR interviewed top and middle managers within the department and worked with the director to design and facilitate two events focused on restructuring: one for the senior leadership team of the department and one that included the full department.

Working closely with the leadership team, we developed a set of recommendations on department structure, best practices, and internal processes to support professional development and rewards. The final recommendations were shaped and endorsed by the company's executive team, as well as the departmental leadership and members of the department. The redesign, and the path to implementing it, were aligned across those who would be required to implement it.

About CFAR

Originally the largest research center within the Wharton School at the University of Pennsylvania, CFAR was spun off as a private practice in 1987 and serves clients worldwide from offices in Philadelphia and Boston. The firm is an experienced management consulting practice specializing in organizational development and strategy for large, complex organizations with multiple stakeholders and diverse interests. Our interdisciplinary staff holds advanced degrees in such varied disciplines as economics, organizational behavior, finance, anthropology, and psychology. As today's pharmaceutical organizations grapple with a deeply complex set of organizational challenges—often on a global scale—CFAR's skills in combining business analytics with applied social science can help pharmaceutical leaders engage people for improved efficiency and faster innovation.