

Overview of the Drug Development Outsourcing Environment

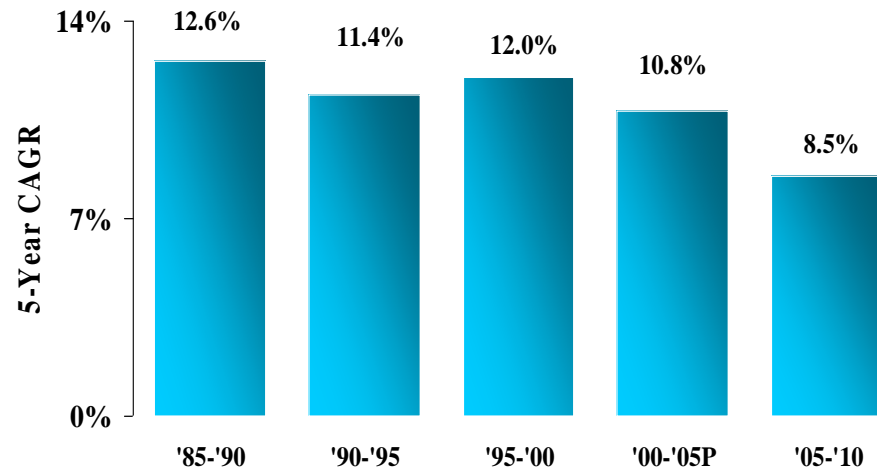
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The R&D Environment

- Decelerating revenue growth for largest sponsors
- Declining impact from blockbuster products in portfolio
- Increasing focus on smaller, target indications

Growth in Ethical Pharmaceutical Sales



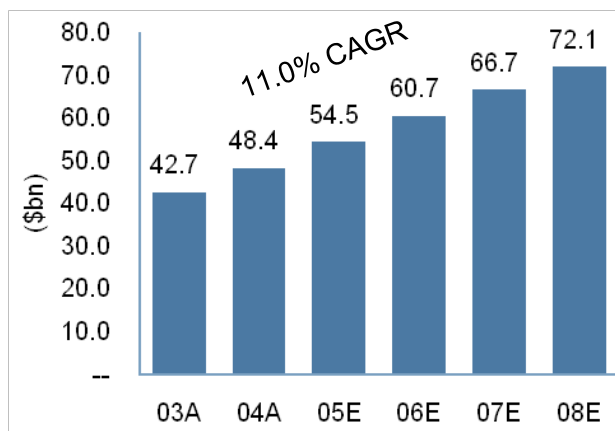
Drug Development Operating Conditions (Post-2000)

- Productivity declining and low success rates
- Rising costs
- Increasing volume and scope of development activity
- Globalization
- Capacity limitations
- Tightening access to capital
- Growing underutilization of infrastructure and assets

Outsourcing Trends

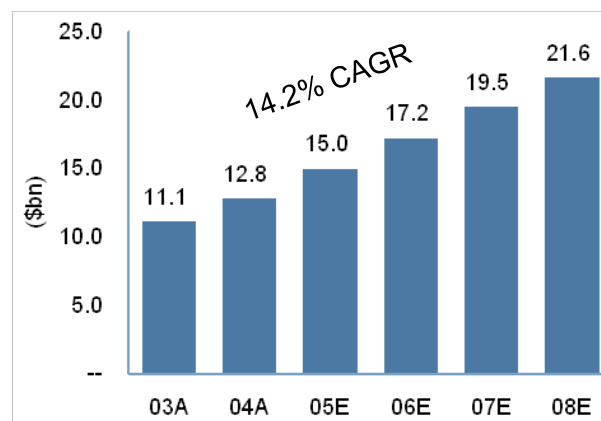
- Typically 25% - 30% of pharma and biotech R&D spend is outsourced
- Outsourcing penetration is expected to increase 1% - 2% per year
- Global CRO market was \$15.0 billion in 2005 and is expected to grow over 14% per year driven by:
 - Globalization of drug development
 - Biotech industry growth
 - Increased regulatory scrutiny
 - Growing need for efficient and cost-effective drug development

Global R&D Spending



Source: Wall Street Equity Research

Global CRO Market



Source: Wall Street Equity Research

Global Development Spending Overall and on Clinical Services Outsourcing* (\$US Billions)

	2001	2003	2005	2007P	6-Yr Annualized Growth
Total Global Development Spending	\$27.3	\$33.6	\$41.5	\$49.6	10.5%
Total Spending on Contract Clinical Services*	\$3.7	\$4.9	\$6.4	\$8.5	14.9%

Source: TCSDD

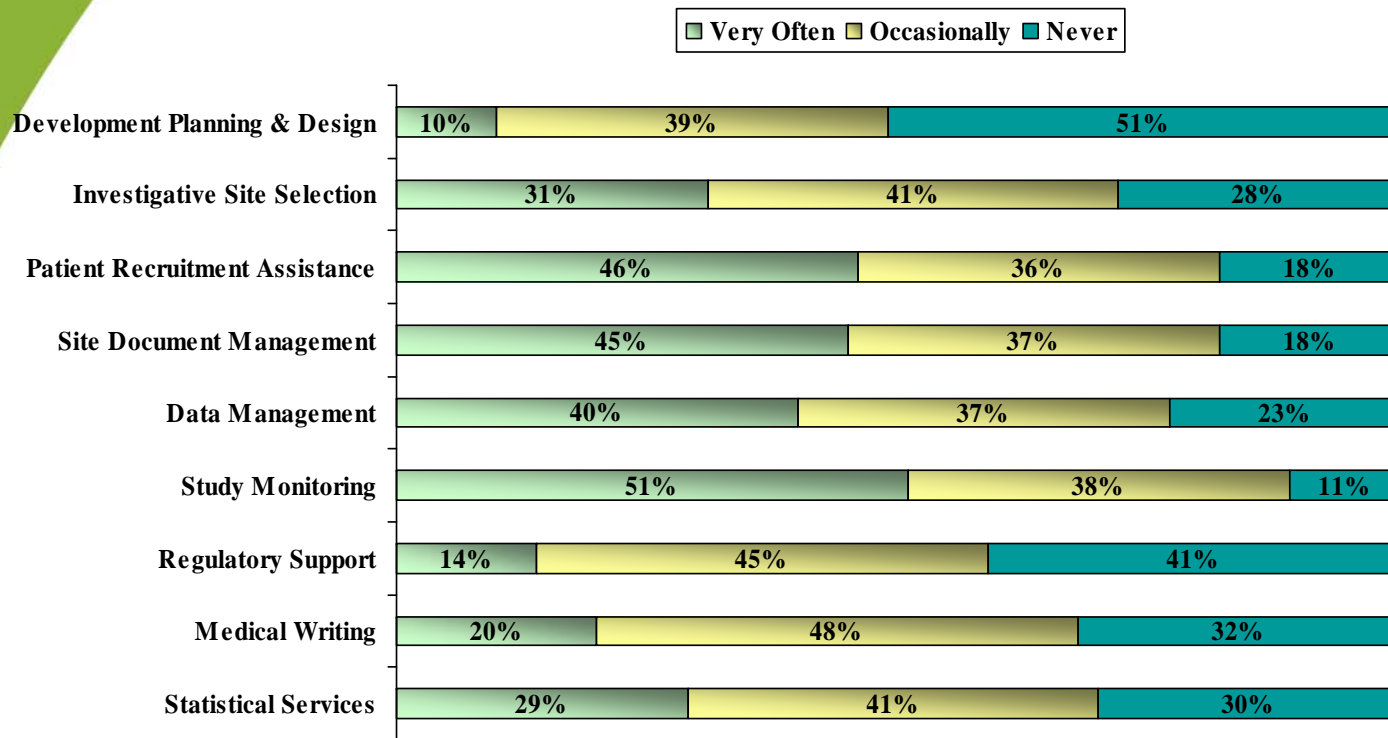
**Note: Does not include pass-through clinical services (e.g., central lab fees, investigator grants)*

Growth Rates by CRO Segment

	<i>Annual Growth Rate '02 – '05</i>
Ten Largest CROs	15.7%
Next Ten Largest CROs	14.9%
Private (Next 300)	6.6%

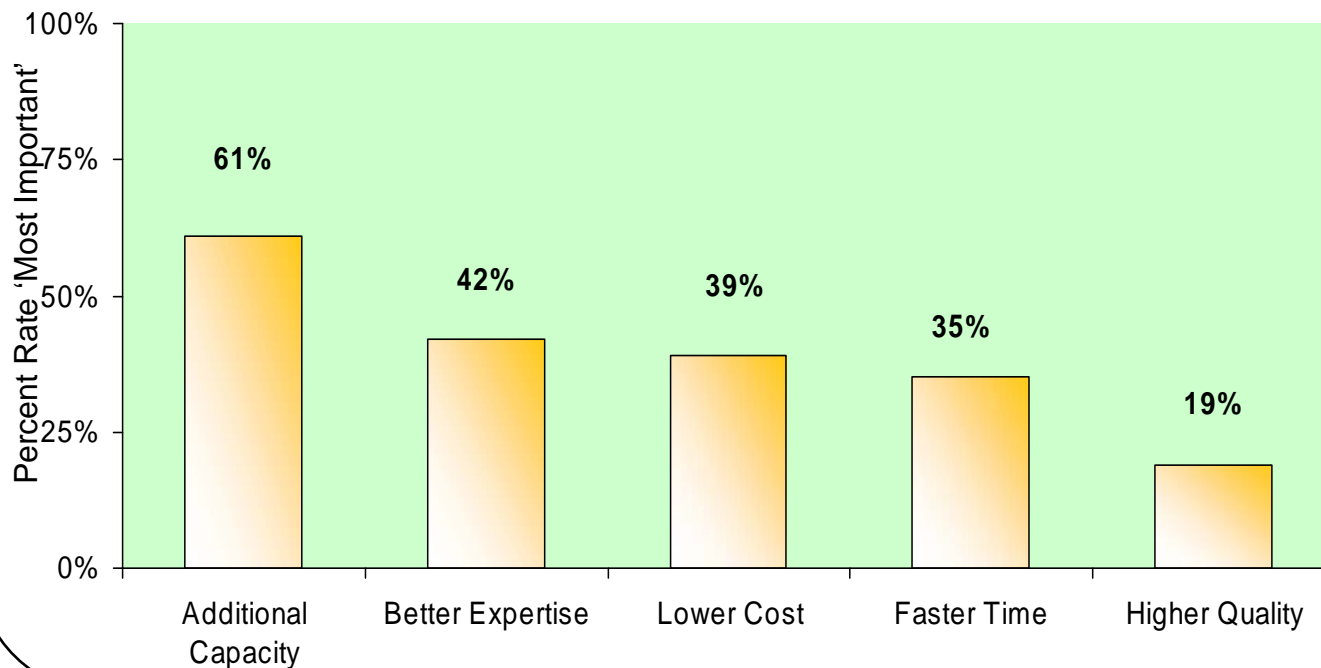
Source: Tufts CSDD 2007 Study

CRO Use by Function



Source: ACT - Vogel & Getz, 2005 Survey of 245 biopharmaceutical companies

Drivers of Outsourcing



Source: TCSDD Study, Interviews with 31 companies, 2005

Existing and Evolving Outsourcing Models

Tactical

- Buying capacity (arms and legs/infrastructure)
- Specialty services
 - Knowledge-based services
 - Local/regional expertise
 - Functional service provider (integrated)

Strategic

- Longer-term partnering relationship, with agreed-upon and shared goals

Characteristics, Benefits

Insourcing FSP

- Flexible resources
- Structured around individuals
- Increased management time
- Reduced FTE costs

Program Outsourcing

- Reduced fixed costs
- Structured around clinical programs
- Consistent global processes
- CRO competition drives process efficiency
- Access to corporate experience

Partnering Alliances

- Non-dilutive R&D spend
- Parallel development & commercialization
- Risk-sharing
- Accelerated value appreciation

The Evolution of Outsourcing

Impact for Pharma and Service Providers

Pharma, Biotech

- More outsourcing options
- Increased flexibility of resources
- Management skill sets
- Core expertise focus – research, marketing

Service Providers

- Changes to the portfolio mix
- Consolidation of traditional players
- Add value or risk commoditization
- New entrants to the market

Challenges

- Study cancellations or delays due to financial climate or reduced ROI
- Competition for and retention of experienced staff in a growing market
- Managing a diversity of outsourcing models and adapting as trends evolve
- Lack of industry standards, from contracts, ISA's, and data standards
- Lack of uniform performance or quality metrics – MCC initiatives focusing on this issue
- Increasing scrutiny and potential liabilities – Phase I studies, post marketing safety issues, etc.