



The 2018 Avoca Industry Report: Clinical Outsourcing Spend & Key Relationship Measures

May 2019

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THE AVOCA GROUP

Introduction

Each year, The Avoca Group surveys industry professionals to understand trends in clinical development, with a particular focus on outsourcing dynamics and relationships between research Sponsors and Providers.

This report summarizes the key findings from our 2018 research.

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Methodology

- All fieldwork was conducted between September and December of 2018.
- A total of 128 completed surveys were received from respondents representing 89 individual Sponsor organizations.
- A total of 159 completed surveys were collected from respondents representing 128 individual Provider organizations.
- Classification information about respondents and companies they represent can be found in the appendix of this report.

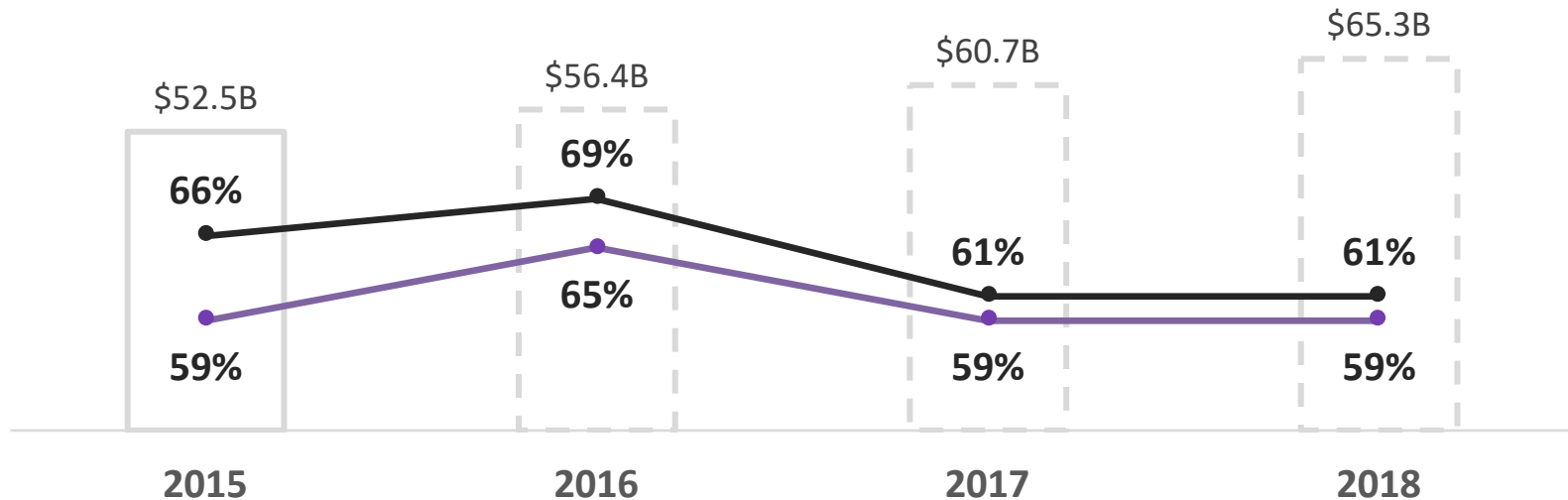
State of the Industry

State of the Industry

The trend in outsourced clinical development spend remains consistent with previous waves of research and is forecasted to remain stable through 2021.

Sponsor: Proportion of Outsourced Clinical Development Spend

▭ R&D Spend (in billions)* ● Current Outsourced Spend ● Outsourced Spend 3 Years From Now



*Source: William Blair Equity Research (April 2016); 2016-2018 spend estimated based on projected 7-8% CAGR annually.

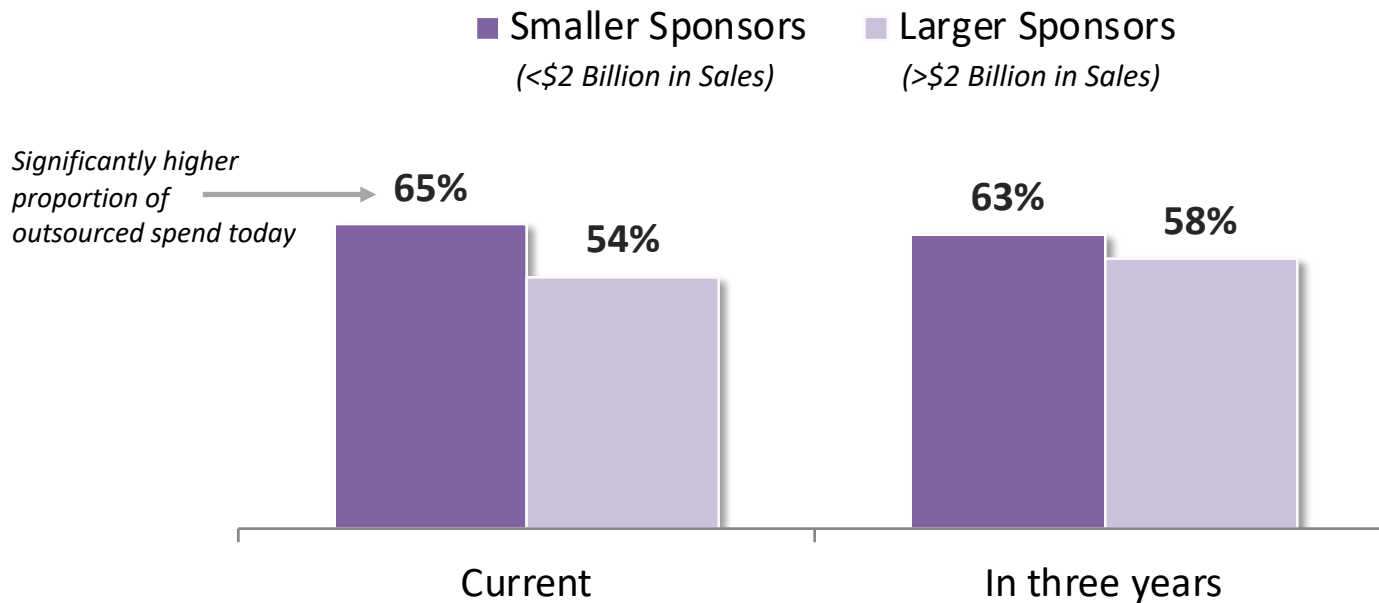
N: Sponsor: 2015=123-131, 2016=112-116, 2017=273, 2018=128

Q: Approximately what percentage of your company's spend on clinical development was outsourced in [YEAR], and what do you expect the percentage will be 3 years from now?

State of the Industry

It is notable that smaller Sponsor organizations are outsourcing a higher proportion of clinical development spend today, but it does appear this gap may narrow over time.

Sponsor: Proportion of Outsourced Spend by Company Size



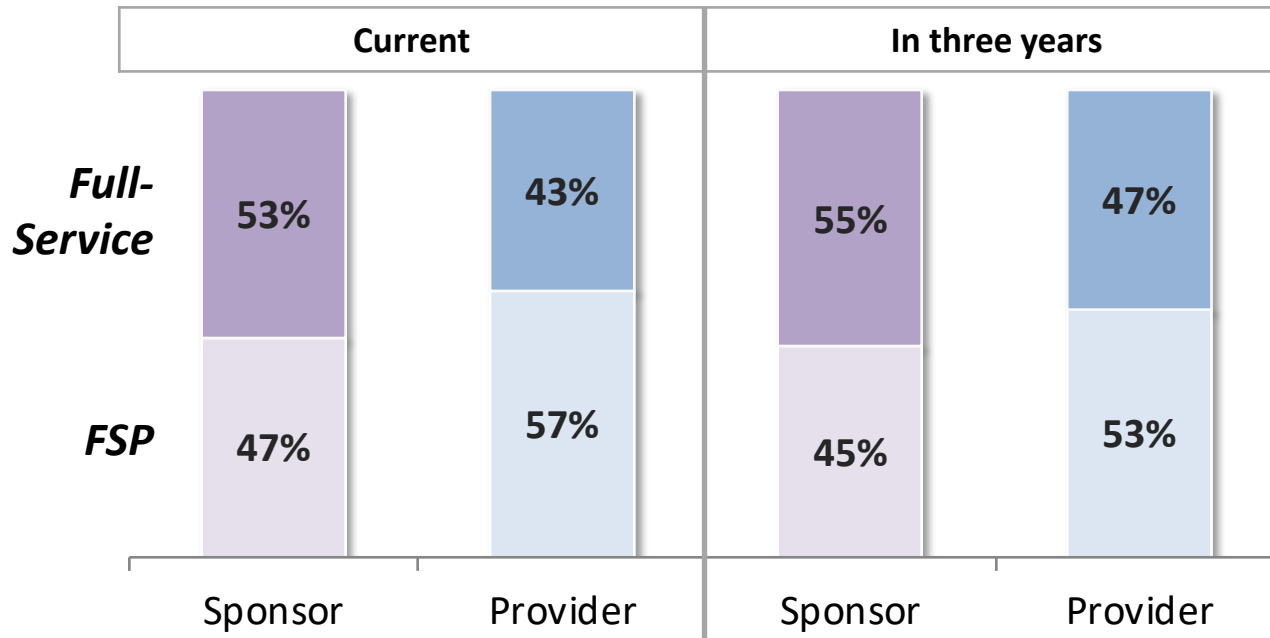
N: Smaller=52, Larger=61

Q: Approximately what percentage of your company's spend on clinical development was outsourced in 2017, and what do you expect the percentage will be 3 years from now?

State of the Industry

Sponsors report a relatively even split between allocation of outsourced dollars to full-service Providers and FSPs. Providers indicate that a higher proportion of revenue comes from their FSP relationships. Both groups expect stability in the three-year outlook.

Proportion of Outsourced Spend Allocated to/by Provider Type



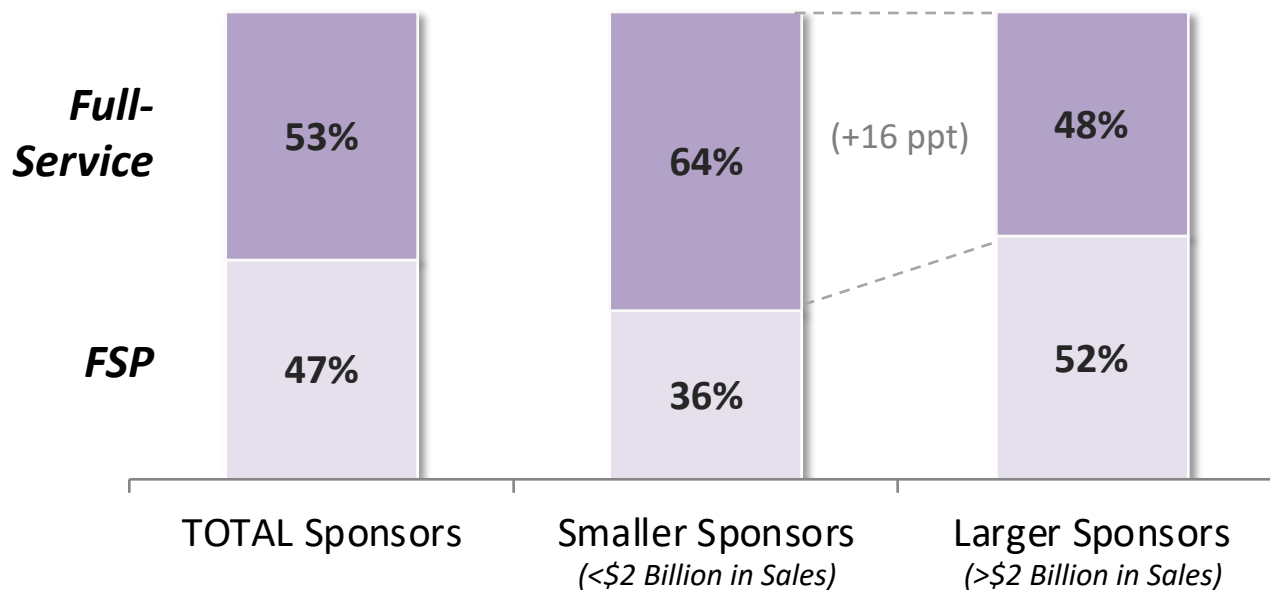
N: Sponsor=128, Provider=156

[Sponsor] Q: Now, of your company's outsourced spend for clinical development, approximately what percentage was allocated to full-service Providers and/or functional service Providers (FSPs) in 2017, and what do you expect the percentage(s) will be 3 years from now? [Provider] Q: Thinking about the work your company does for Sponsors, approximately what proportion of revenues comes from full-service and/or functional service (FSP) models in 2017, and what do you expect the percentage(s) will be 3 years from now?

State of the Industry

As expected, smaller Sponsor organizations are allocating more of their outsourced clinical development spend to full-service Providers, while those representing larger Sponsor companies report an even split.

Sponsor: Current Allocated Spend to Provider Type by Company Size



N: Sponsor=127, Smaller=52, Larger=61

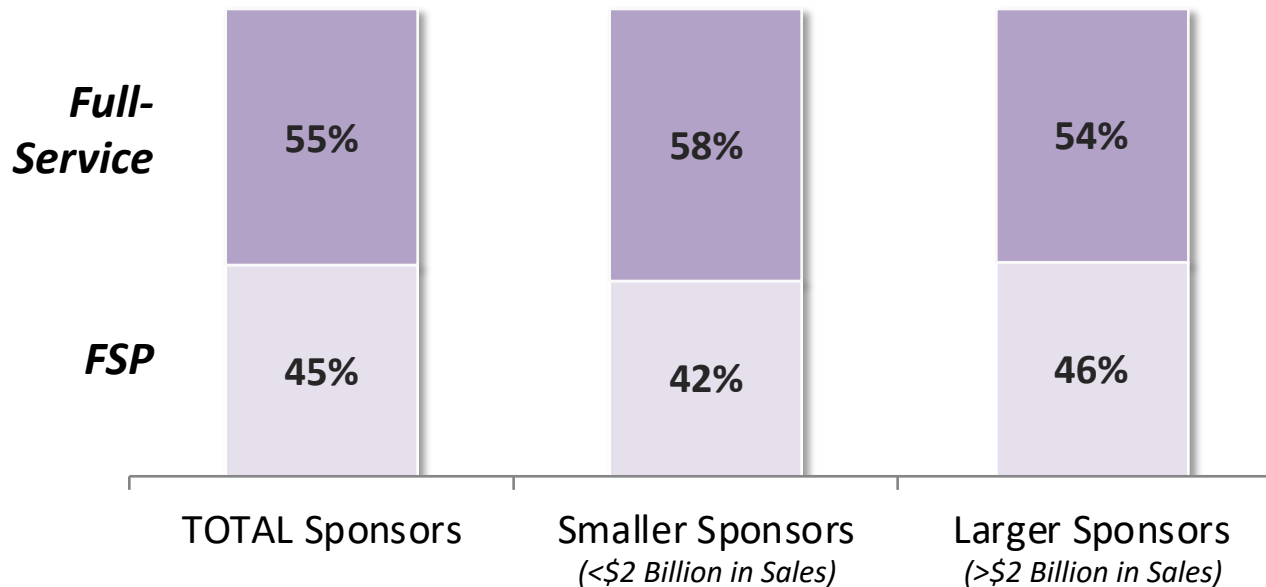
Q: Now, of your company's outsourced spend for clinical development, approximately what percentage was allocated to full-service Providers and/or functional service Providers (FSPs) in 2017, and what do you expect the percentage(s) will be 3 years from now?

State of the Industry

The differences in allocation of outsourced spend by company size are expected to narrow in the near future.

Sponsor: Future Allocated Spend to Provider Type by Company Size

Estimated Allocation in Three Years



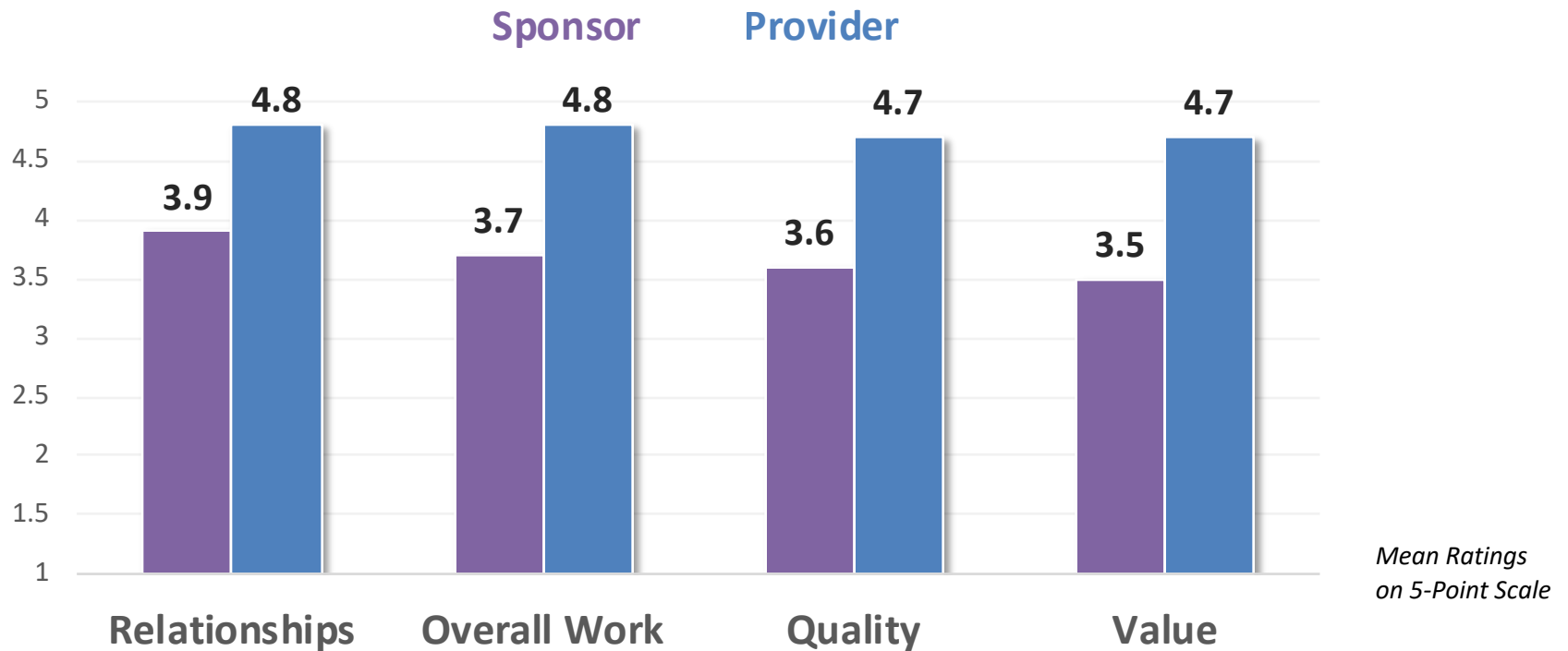
N: Sponsor=127, Smaller=52, Larger=61

Q: Now, of your company's outsourced spend for clinical development, approximately what percentage was allocated to full-service Providers and/or functional service Providers (FSPs) in 2017, and what do you expect the percentage(s) will be 3 years from now?

State of the Industry

There is a marked gap in satisfaction between what Sponsors feel they are getting from Providers, and what Providers feel they are delivering to clients.

Overall Assessment of Relationship Health



N: Sponsor=124-125, Provider=151-155

Q: Thinking about your experiences in 2017, how satisfied are you with... (1=Very dissatisfied, 5=Very satisfied)

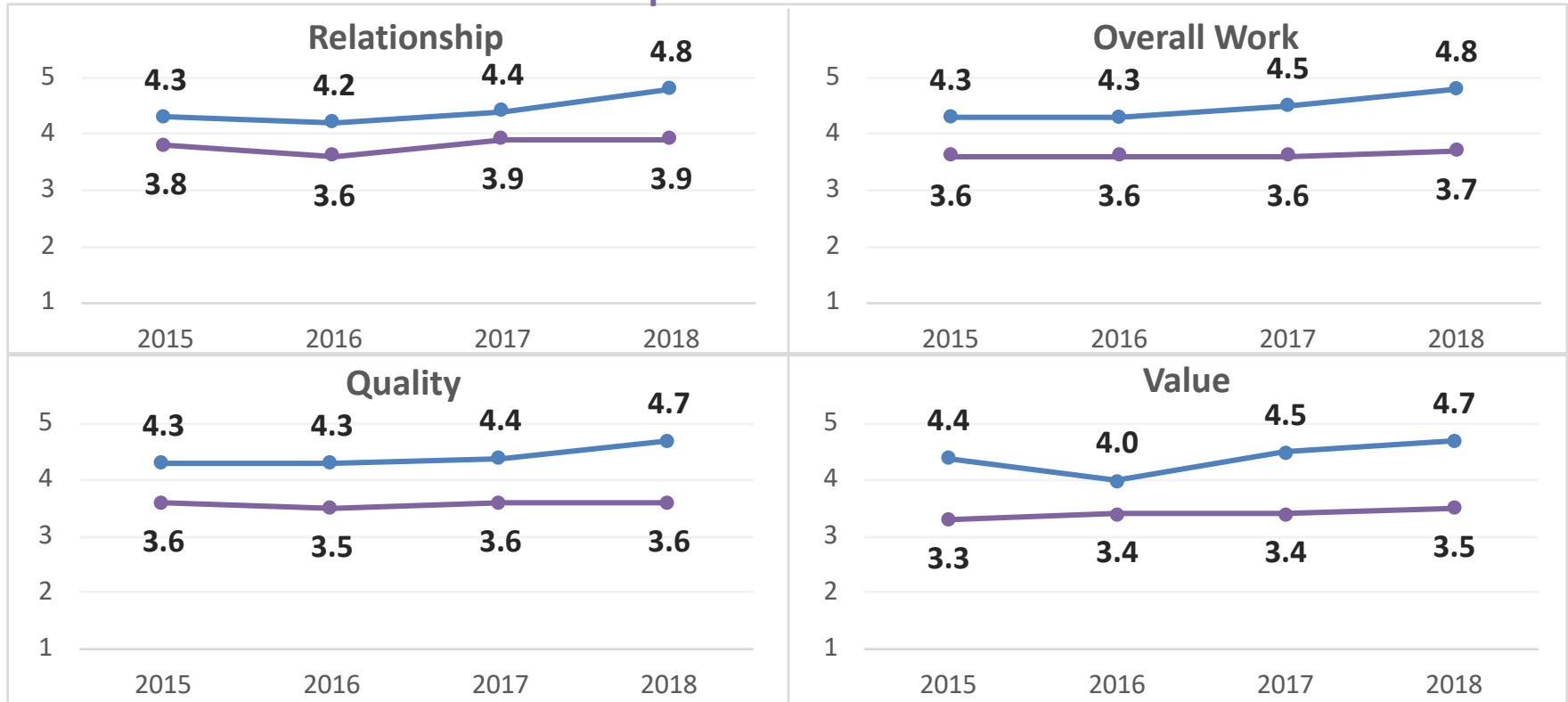
State of the Industry

These gaps have persisted and appear to be widening in the most recent wave of surveying due to Providers expressing even more favorable ratings of their delivery than in years past.

Trend in Overall Assessment of Relationship Health

— Sponsor — Provider

Mean Ratings
on 5-Point Scale



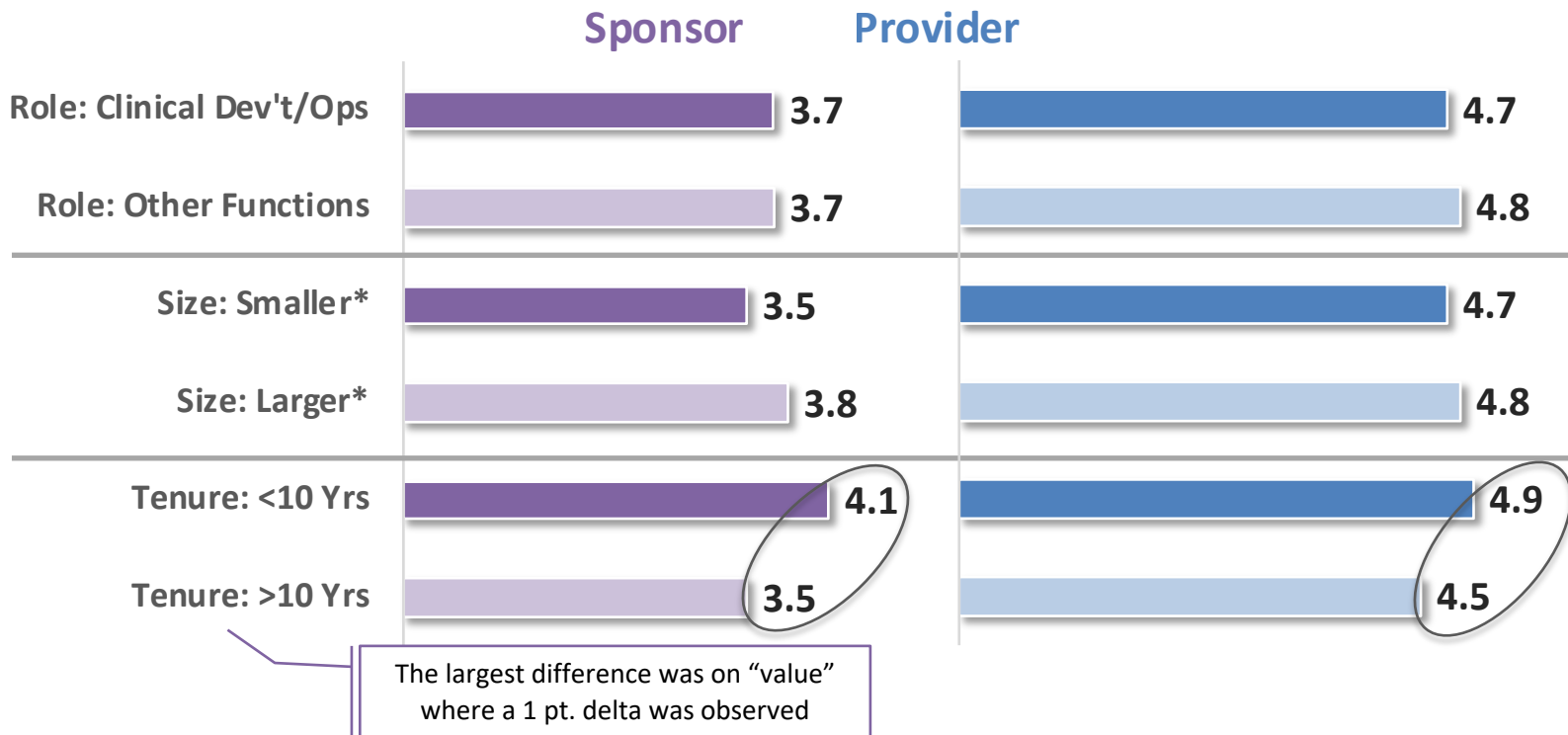
2015 N: Sponsor=148-152, Provider=88-90; 2016 N: Sponsor=104-105, Provider=56-60; 2017 N: Sponsor=255-265; Provider=117-120; 2018 N: Sponsor=124-125; Provider=151-155

Q: Thinking about your experiences in [YEAR], how satisfied are you with... (1=Very dissatisfied, 5=Very satisfied)

State of the Industry

Looking at aggregated means across relationship indicators, differences in ratings are most exaggerated by length of time in industry, especially among Sponsors. Role/function and size of company do not have as much of an impact on satisfaction ratings.

What is driving relationship ratings?



Mean Ratings on 5-Point Scale: Numbers represent the average across all key relationship indicators by sub-group.

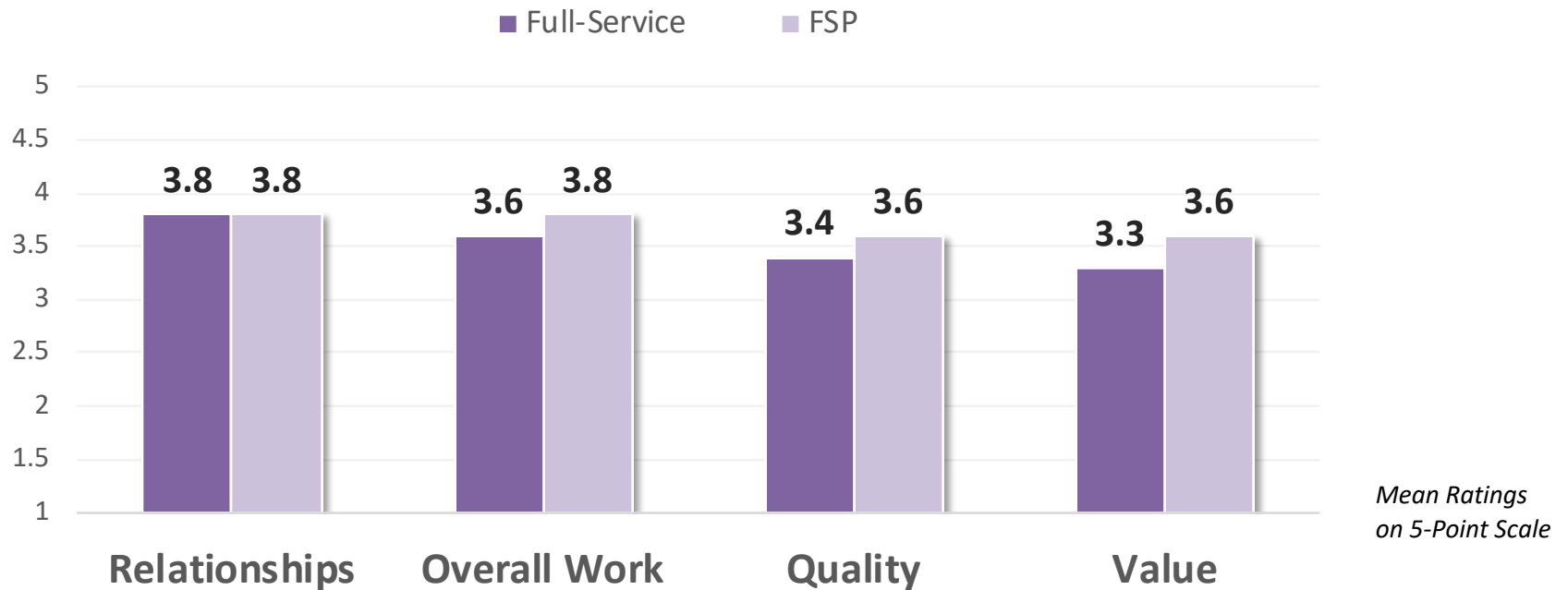
*Larger Sponsor: >\$2B in sales, Smaller Sponsor: <\$2B in sales, Larger Provider: >\$50M in sales, Smaller Provider: <\$50M in sales

N: Sponsor Clin Dev't=53-54, Other Functions=51-53, Smaller=51-52, Larger=59-60, <10 Yrs=50-52, >10 Yrs=63-65;
 Provider Clin Dev't=47-49, Other Functions=88-90, Smaller=62-65, Larger=85-87, <10 Yrs=109-111, >10 Yrs=37-38
 Q: Thinking about your experiences in 2017, how satisfied are you with... (1=Very dissatisfied, 5=Very satisfied)

State of the Industry

No notable differences were identified in ratings of relationship indicators by the outsourcing model that Sponsors primarily employ.

Sponsors: Overall Assessment of Relationship Health By Outsourcing Model Primarily Used*



N: *Sponsors who report 60%+ usage of Full Service OS model=56-57, 60%+ Usage of FSP OS model=41-43
Q: Thinking about your experiences in 2017, how satisfied are you with... (1=Very dissatisfied, 5=Very satisfied)

State of the Industry: Key Takeaways

- Outsourced clinical development spend remains steady among Sponsors, at around 60% of the total budget.
- Both proportion of spend and how this money is spent – on full-service Providers vs. FSPs – varies by the size of the Sponsor organization.
- Smaller Sponsors are outsourcing more of their spend, and are utilizing full-service Providers more-so than larger Sponsors.
- Satisfaction with key relationship indicators peaked among Providers in this year's research, further widening the gap between Sponsor and Provider perceptions.
- Data suggest that respondents' tenure in the pharmaceutical industry influences perceptions of satisfaction with outsourcing relationships.

Thank You!

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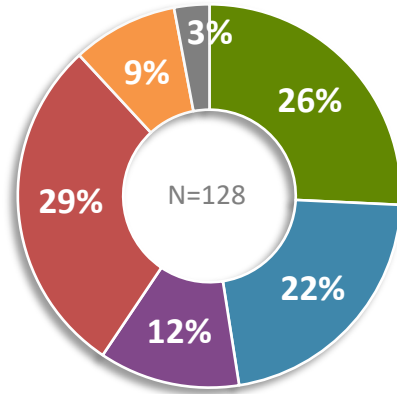


Appendix

Company Characteristics

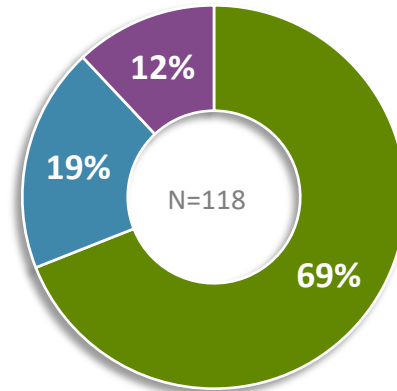
Sponsor: Company Size

- Top 20 Biopharma (\$10+ billion sales)
- Top 50 / Mid-sized Biopharma (\$2.0 - \$9.9 billion sales)
- Other Mid-sized Biopharma (\$500 million - \$1.9 billion sales)
- Small / Specialty Biopharma (<\$500 million sales)
- Medical Device company
- Other



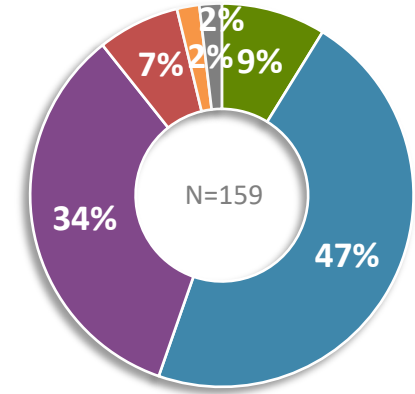
Sponsor: Company Headquarters

- United States
- Western Europe
- Other



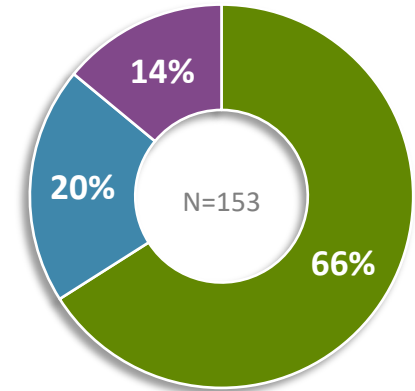
Provider: Company Type

- Large CRO (\$500+ million sales)
- Mid-size CRO (\$50 - \$500 million sales)
- Small/Specialty CRO (<\$50 million sales)
- Non-CRO Clinical Service Provider
- Consulting Company
- Other



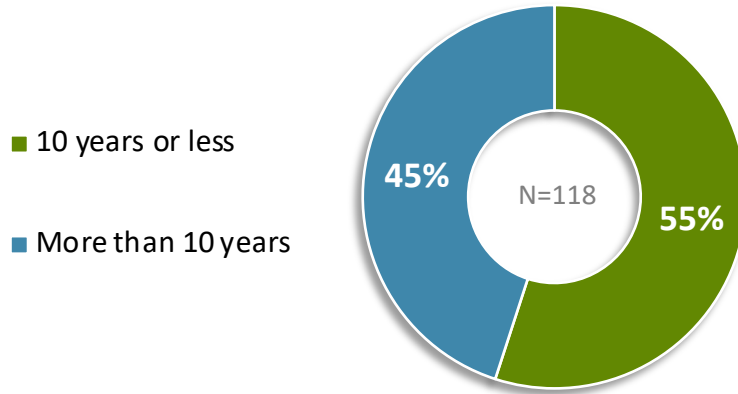
Provider: Company Headquarters

- United States
- Western Europe
- Other

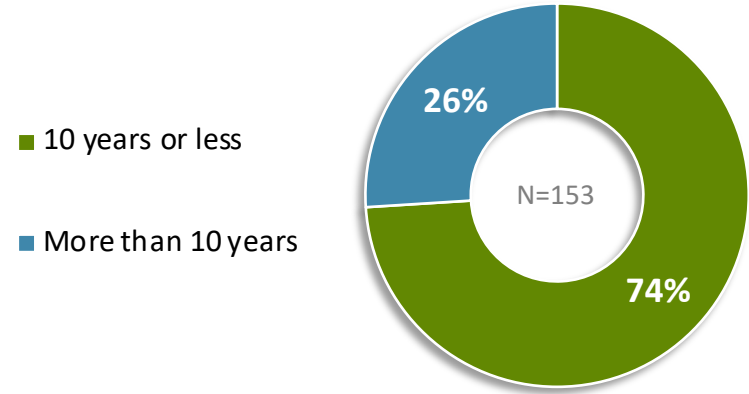


Respondent Characteristics

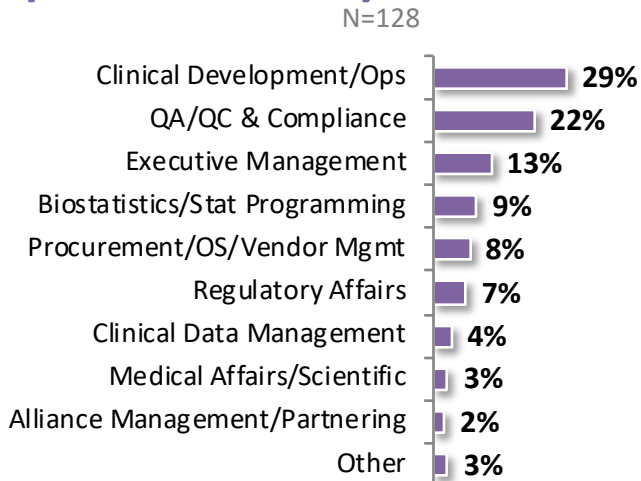
Sponsor: Time in Industry



Provider: Time in Industry



Sponsor: Primary Functional Area



Provider: Primary Functional Area

