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Cooperative Research
Centers

Center Fidelity Survey

IUCRC Evaluator's Meeting
June 11-12, 2015

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Background and Goal

- Background
 - IUCRCs continue to exhibit heterogeneity on how consortially they operate
 - Questions have also come up about the extent to which IUCRCs represent “team science” (e.g., multidisciplinary, team-based)
 - Examined in 2012
- Goals
 - Re-examine the extent to which IUCRCs exhibit fidelity to the consortial model
 - Re-examine the extent to which IUCRCs practice “team science”
 - Re-examine students’ participation in IUCRCs
 - Explore the relationships among these variables



Methodology

- Collected from evaluators as part of Leonchuk's thesis
- Questionnaire
 - Completed by evaluator rating center practices and operations (e.g. meeting attendance)
 - N=66
 - Questions with * are new
- Merged with archival data
 - Structural data
 - Process/Outcome data



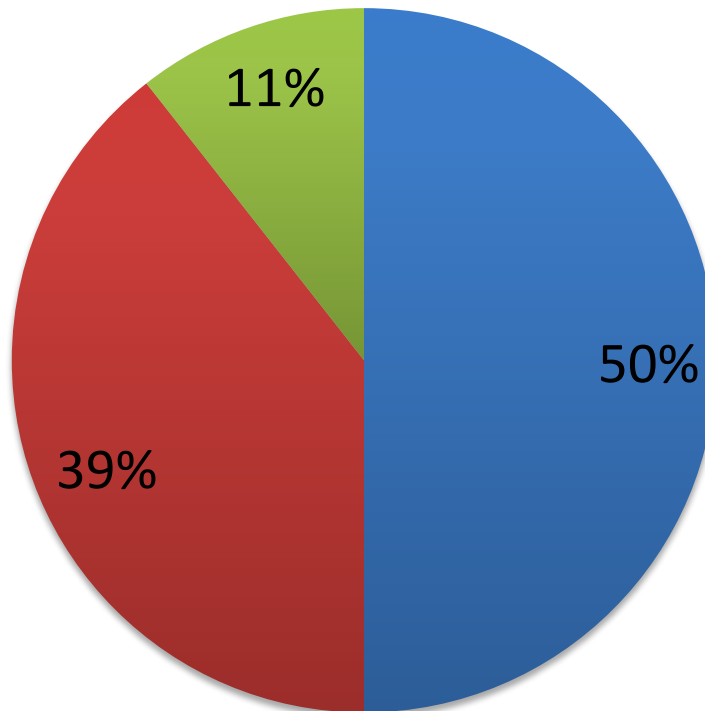
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Fidelity and Attendance

Which of the following best describes how this multi-site center operates?

Decision Making

N = 66

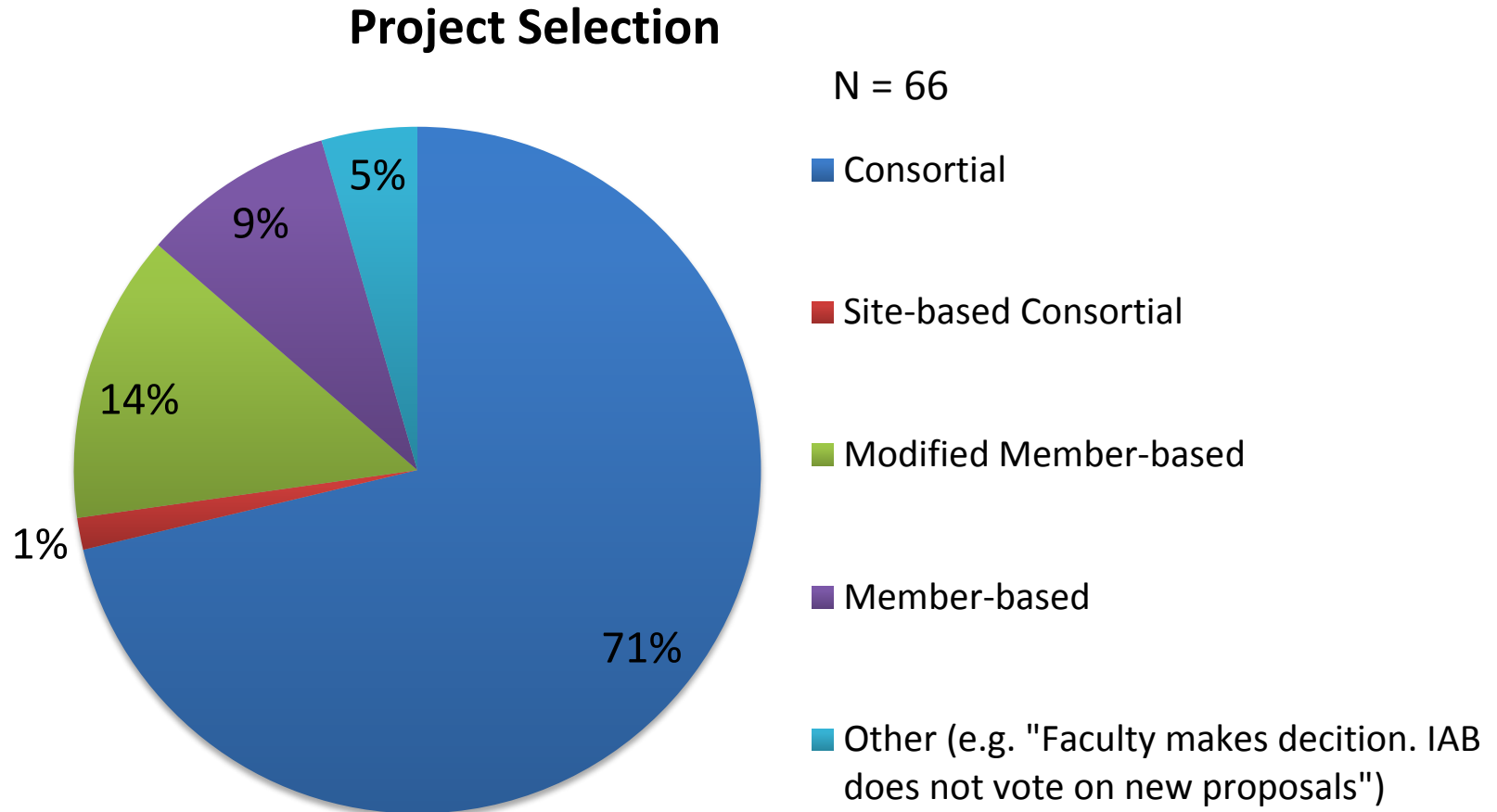


■ All important aspects of center operations and decisions are handled as a single, integrated center.

■ Most center operations and decisions are handles as a single, integrated center, but some important issues appear to be handled at the separate sites.

■ All important aspects of center operations and decisions appear to be handled at the separate sites

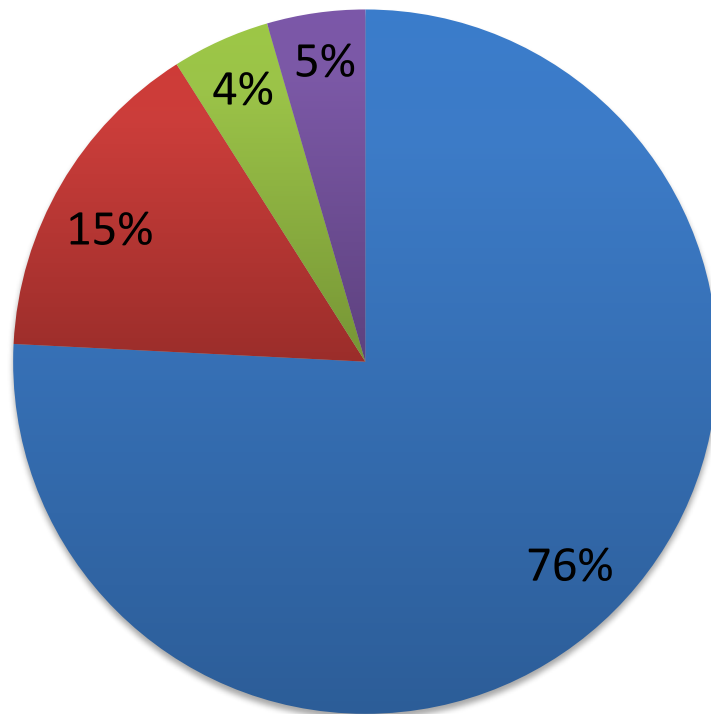
Which of the following new project decision-making procedures best describes how new research proposals are selected/approved at this center?



Which of the following statements best describes how this center provides project results to their dues-paying IAB members?

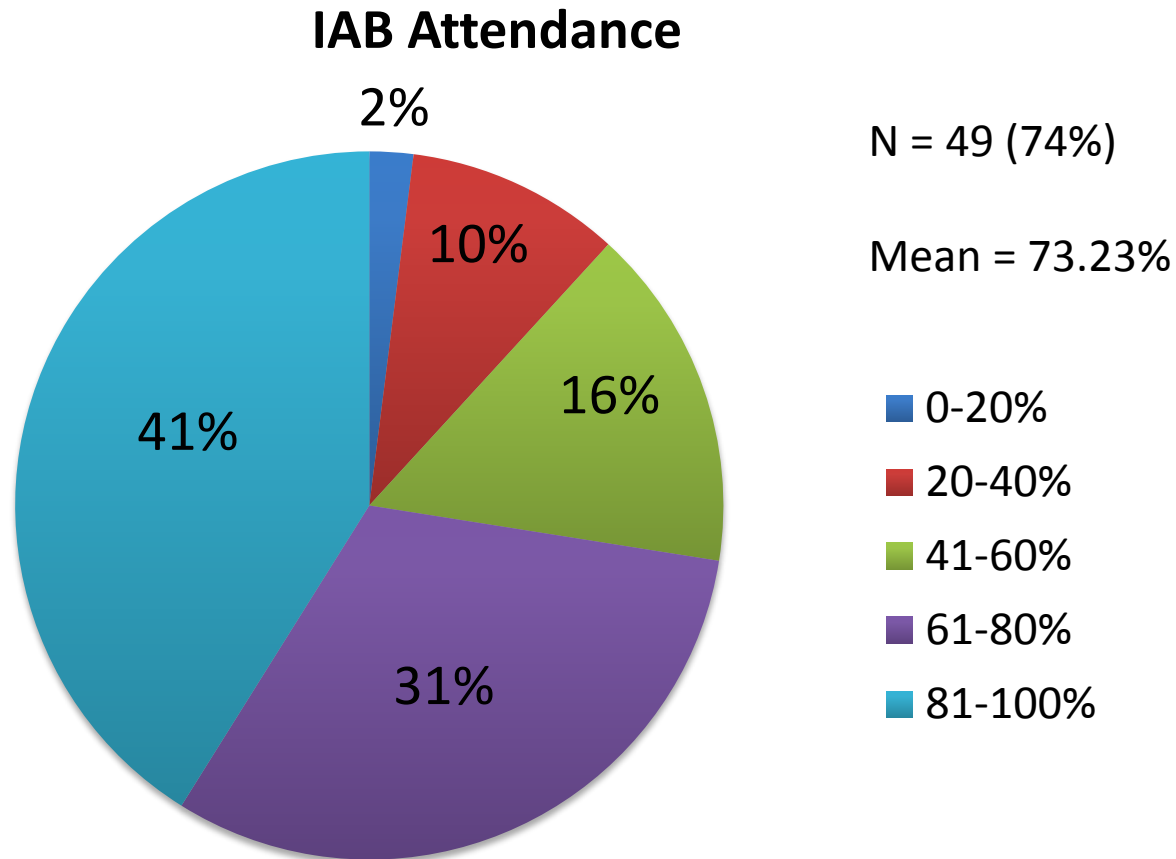
Results Dissemination

N = 66



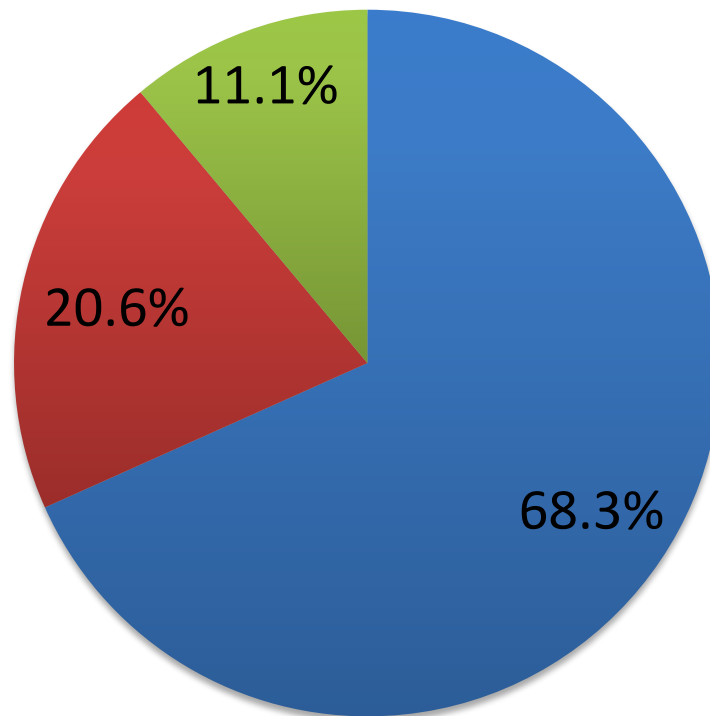
- Consortial: All center members are given the results of all projects by presentations and/or written report.
- Modified member-based: Some members receive earlier or more complete information about some center projects considered their projects, but everyone eventually receives all presentations or reports.
- Member-based: Some members receive results of some center projects that are not shared with other members.
- Other (e.g. "Varies")

If both meetings were face-to-face, estimate the percentage of total IAB members who attended.*



Which of the following best describes IAB attendance at a typical face-to-face IAB meeting?

Last Meeting



N of single-site centers
excluded = 3 (4%)

N = 63

- Equal attendance across sites
- Host site dominant attendance
- Other

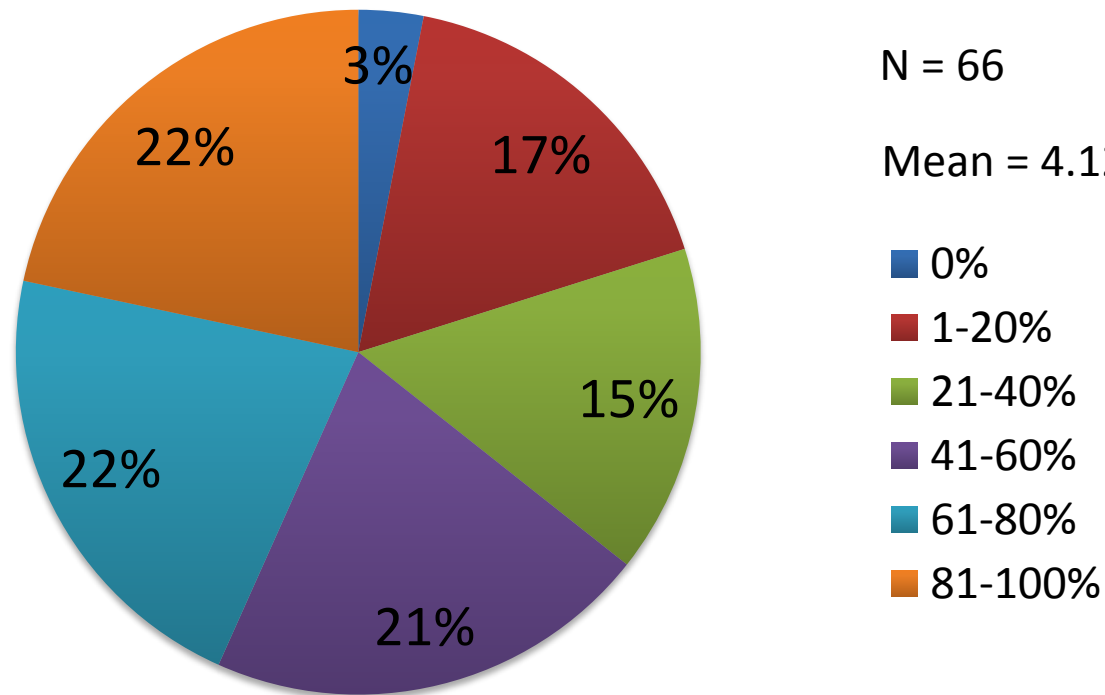


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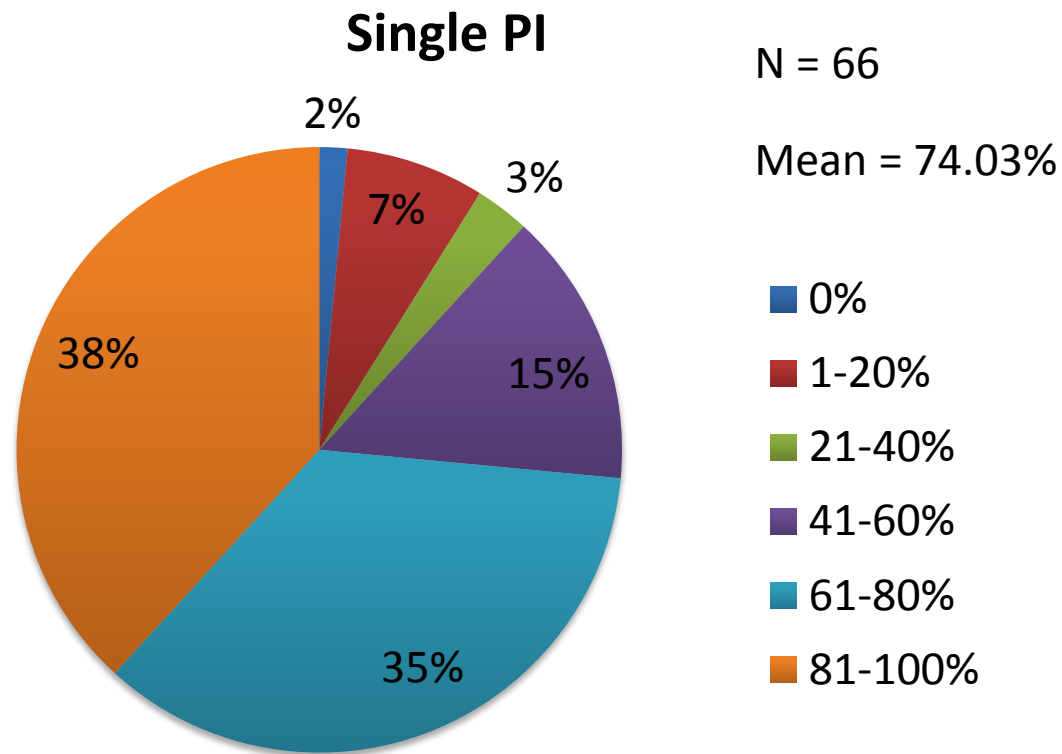
Students and Team Science

Estimate the percentage of project funded students who attend a typical IAB meeting.*

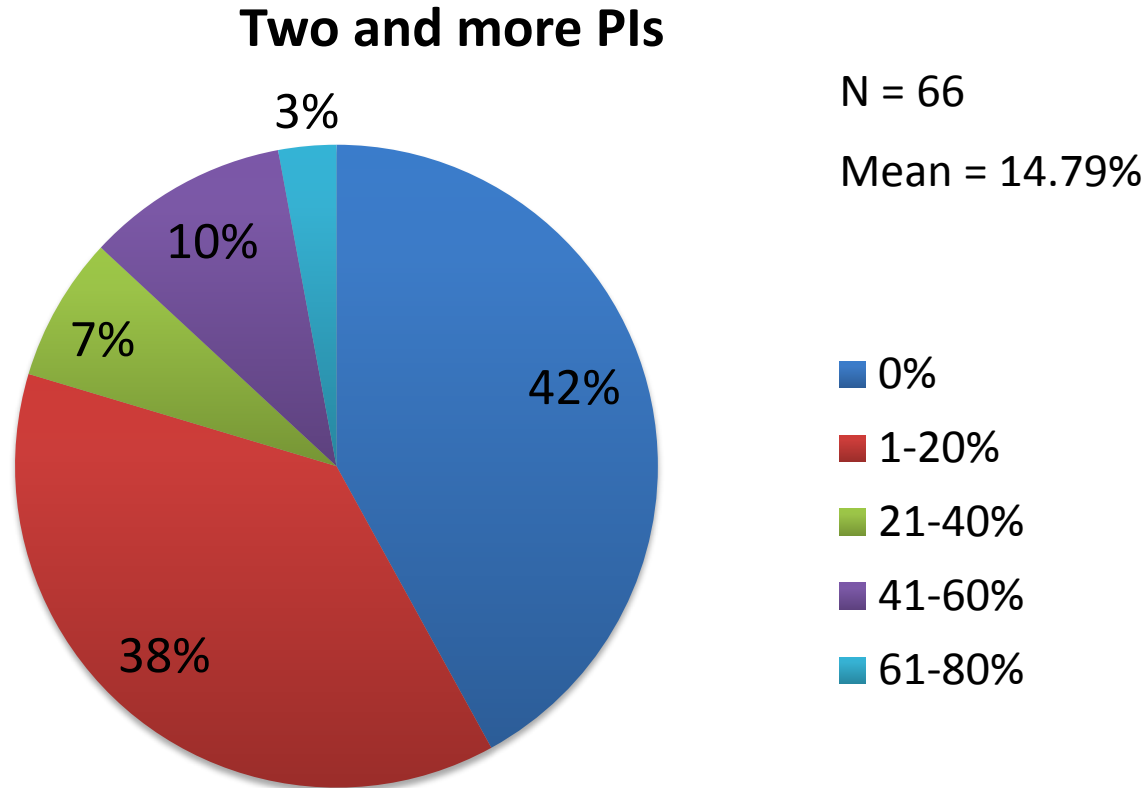
Students Attendance



Percentage of center projects involving single PIs working with their own graduate students.



Percentage of center projects involve 2 or more collaborating PIs and graduate students at the same site.

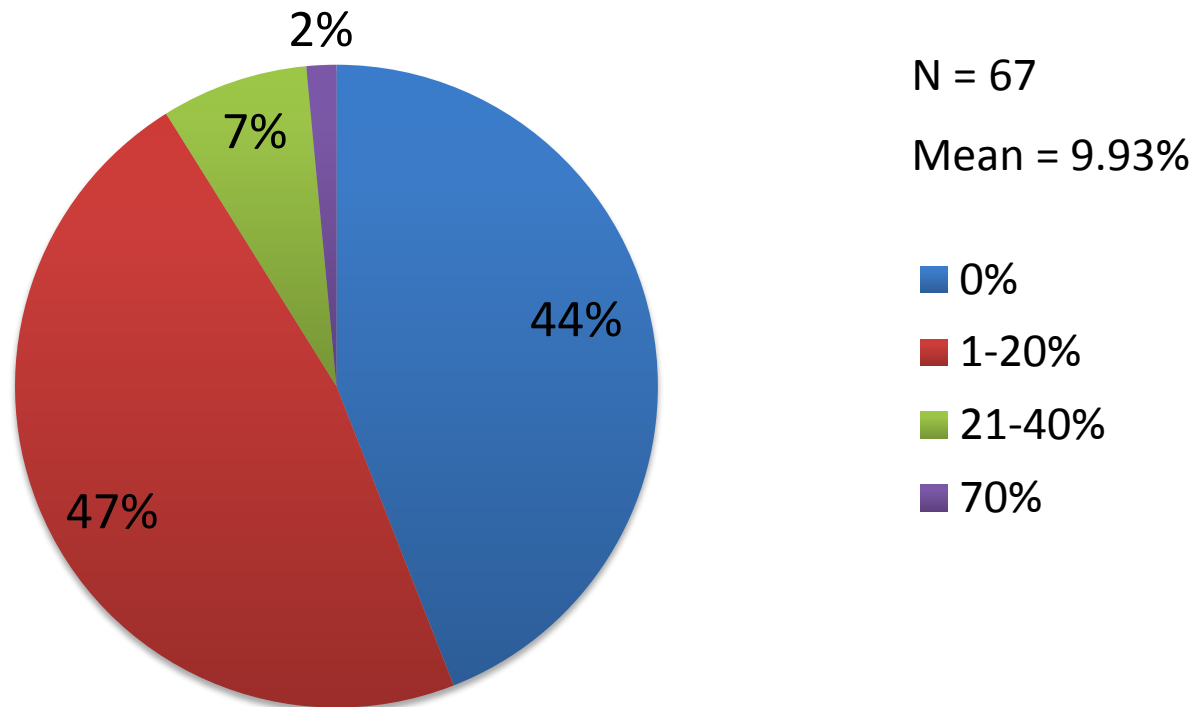


Percentage of center projects involve 2 or more collaborating PIs and graduate students at different university sites.



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Two or more PIs at different sites





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Predictive Analyses

Preliminary Findings



Question?

- What are the consequences of operating at varying degrees of fidelity?
 - Does it have implications for structural outcomes?
 - Does it have implications for factors measured by the process/outcome questionnaire or fidelity questionnaire (e.g. multidisciplinary)?



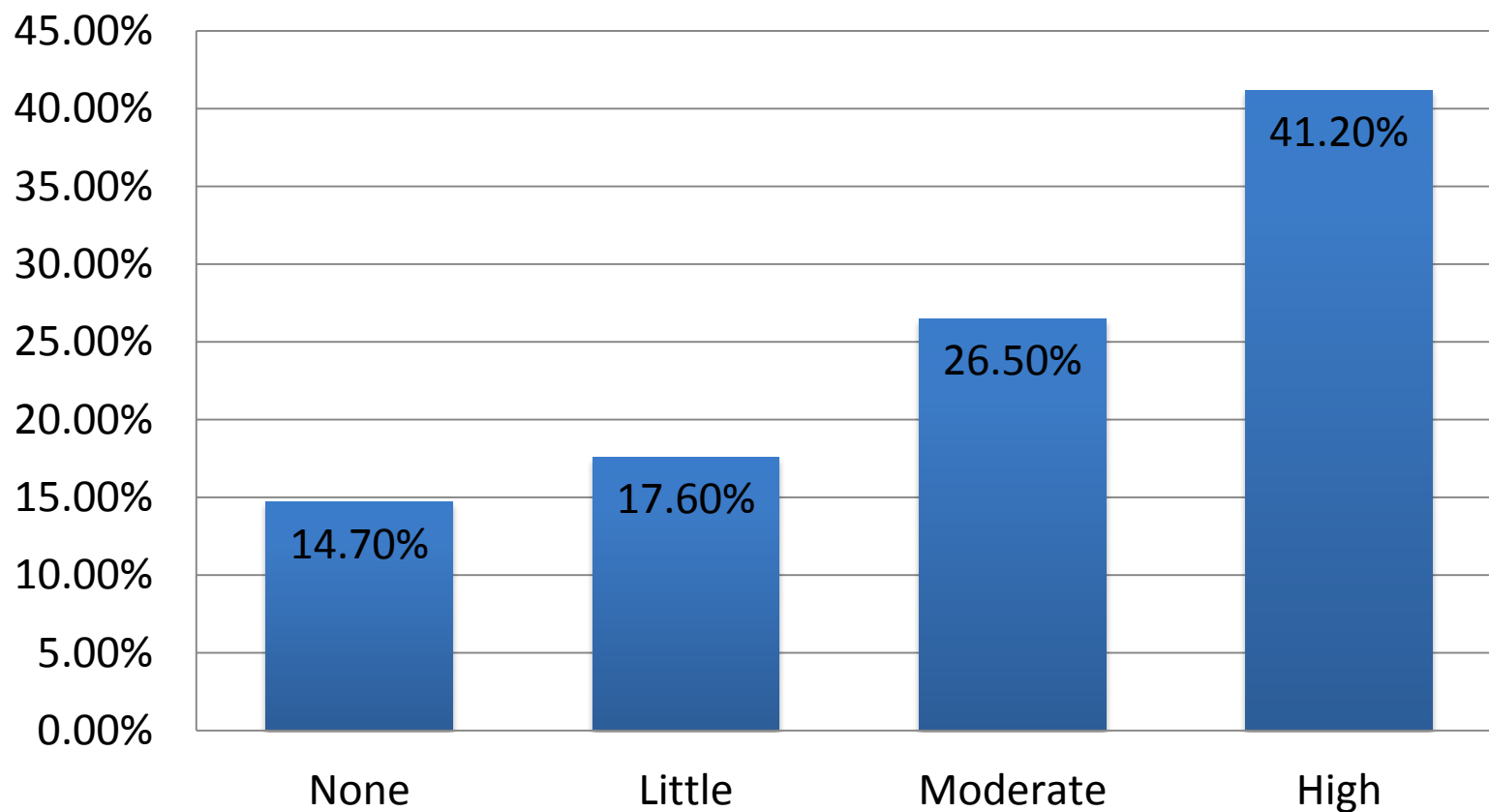
Methodology

- Creating Fidelity Scale
 1. Dichotomize three Fidelity questions:
 - 1) Q8 (decision making)
 - 2) Q22 (project selection)
 - 3) Q23 (results dissemination)
 - 1 = high fidelity
 - 0 = low fidelity
 2. Three fidelity scores based on Fidelity sum (range 0-3)
 - Three levels: Low (None + Low), Medium and High
 - Two levels: Low (None + Low), and High (Medium + High)**
 - Two levels: Low (None + Low + Medium), and High
- Predictive Analyses
 - Bivariate correlations



Fidelity score

Fidelity

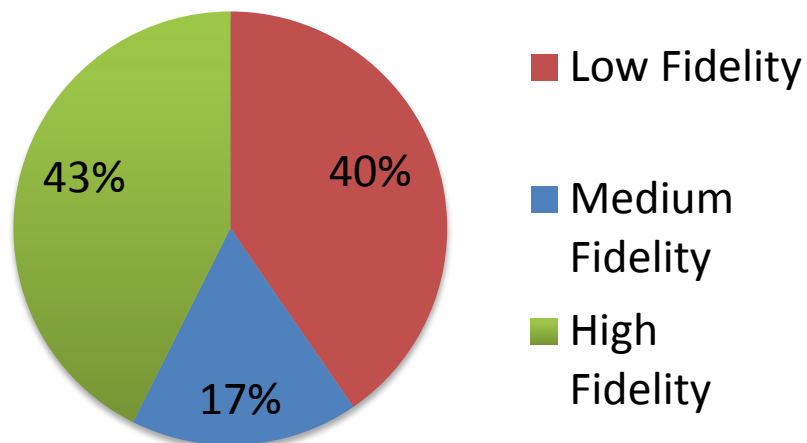




Fidelity score historical comparison

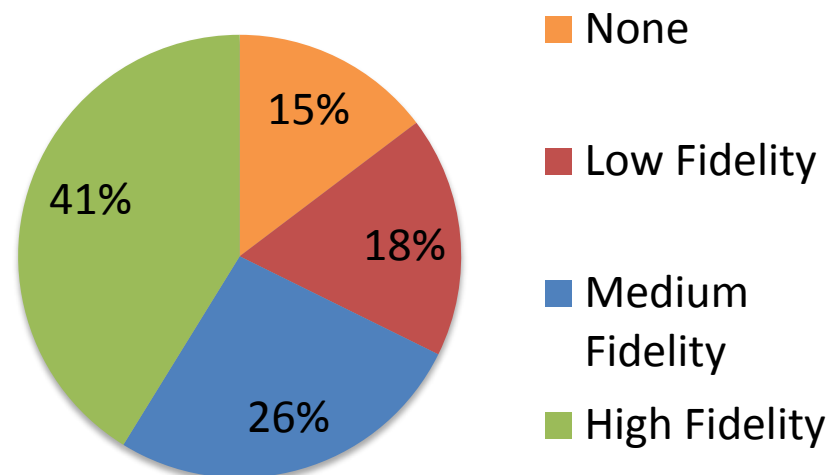
Fidelity 2012

N = 48



Fidelity 2015

N = 66





Significant Correlates with Fidelity*

Variables		Fidelity 1***
Percentage of Members Physically Attending the Meetings	Pearson Correlation	.541**
	Sig. (2-tailed)	.000
	N	50
Percentage of CD Time Teaching	Pearson Correlation	-.269*
	Sig. (2-tailed)	.038
	N	60
Members Left over Center Lifetime	Pearson Correlation	-.260*
	Sig. (2-tailed)	.045
	N	60

Note: * $p < .05$, ** $p < .01$

***Fidelity 1: 0 - Low Fidelity (None + Low) and 1 - High Fidelity (Medium + High)



Conclusion

- Centers' fidelity scores have not significantly changed in the last 3 years
 - Exception: 15% have “None” of the fidelity (scored 0 on all three fidelity indicators)
- Only 41% of centers have “high” fidelity to the consortium model
- Higher fidelity score is associated with:
 - More members attending center meetings
 - Fewer members leaving the center over lifetime
 - Center directors spending less of their time teaching