Center Fidelity Survey

IUCRC Evaluator’s Meeting
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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
Fidelity and Attendance
Which of the following best describes how this multi-site center operates?

**Decision Making**

- **50%**
  - All important aspects of center operations and decisions are handled as a single, integrated center.

- **39%**
  - Most center operations and decisions are handled as a single, integrated center, but some important issues appear to be handled at the separate sites.

- **11%**
  - All important aspects of center operations and decisions appear to be handled at the separate sites.

_N = 66_
Which of the following new project decision-making procedures best describes how new research proposals are selected/approved at this center?

![Pie chart showing project selection procedures]

- **Consortial**: 71%
- **Site-based Consortial**: 9%
- **Modified Member-based**: 14%
- **Member-based**: 5%
- **Other (e.g. "Faculty makes decision. IAB does not vote on new proposals")**: 1%

N = 66
Which of the following statements best describes how this center provides project results to their dues-paying IAB members?

- **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")**

**Results Dissemination**

N = 66
If both meetings were face-to-face, estimate the percentage of total IAB members who attended.*

IAB Attendance

- 2% 0-20%
- 10% 20-40%
- 16% 41-60%
- 31% 61-80%
- 41% 81-100%

N = 49 (74%)
Mean = 73.23%
Which of the following best describes IAB attendance at a typical face-to-face IAB meeting?

- 68.3% Equal attendance across sites
- 20.6% Host site dominant attendance
- 11.1% Other

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

N = 63
Students and Team Science
Estimate the percentage of project funded students who attend a typical IAB meeting.*

**Students Attendance**

- 0%: 3%
- 1-20%: 17%
- 21-40%: 15%
- 41-60%: 22%
- 61-80%: 22%
- 81-100%: 22%

N = 66

Mean = 4.12 (41-60%)
Percentage of center projects involving single PIs working with their own graduate students.

- 38% of projects involve single PIs working with 0% of their own graduate students.
- 35% of projects involve single PIs working with 1-20% of their own graduate students.
- 15% of projects involve single PIs working with 21-40% of their own graduate students.
- 7% of projects involve single PIs working with 41-60% of their own graduate students.
- 3% of projects involve single PIs working with 61-80% of their own graduate students.
- 2% of projects involve single PIs working with 81-100% of their own graduate students.

N = 66
Mean = 74.03%
Percentage of center projects involve 2 or more collaborating PIs and graduate students at the same site.

**Pie Chart**

- 42%: 0% range
- 38%: 1-20% range
- 7%: 21-40% range
- 10%: 41-60% range
- 3%: 61-80% range

**Statistics**

- N = 66
- Mean = 14.79%
Percentage of center projects involve 2 or more collaborating PIs and graduate students at different university sites.

Two or more PIs at different sites

- 44%
- 47%
- 7%
- 2%

N = 67
Mean = 9.93%

- 0%
- 1-20%
- 21-40%
- 70%
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. multidisciplinarity)?
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

None: 14.70%
Little: 17.60%
Moderate: 26.50%
High: 41.20%
Fidelity score historical comparison

**Fidelity 2012**  
N = 48

- Low Fidelity: 43%
- Medium Fidelity: 40%
- High Fidelity: 17%

**Fidelity 2015**  
N = 66

- None: 15%
- Low Fidelity: 18%
- Medium Fidelity: 26%
- High Fidelity: 41%

IUCRC Evaluation Team
## Significant Correlates with Fidelity*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Fidelity 1***</th>
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<tbody>
<tr>
<td>Percentage of Members Physically Attending the Meetings</td>
<td>Pearson Correlation .541**&lt;br&gt;Sig. (2-tailed) .000&lt;br&gt;N 50</td>
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<tr>
<td>Percentage of CD Time Teaching</td>
<td>Pearson Correlation -.269*&lt;br&gt;Sig. (2-tailed) .038&lt;br&gt;N 60</td>
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<tr>
<td>Members Left over Center Lifetime</td>
<td>Pearson Correlation -.260*&lt;br&gt;Sig. (2-tailed) .045&lt;br&gt;N 60</td>
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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