SOCIAL WORK INTERVENTION RESEARCH: MODELS AND ISSUES

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Silberman School of Social Work at Hunter College

March 27, 2013
Mandel School of Applied Social Sciences
Plan

• Morning
  • General Trajectory of Intervention Research in Social Work
  • Critical Time Intervention: Successes and Challenges

• Afternoon
  • What NIH Reviewers are Looking For
  • Responding to Study Critiques
Acknowledgements

• Summer Institutes on Social and Behavioral Research sponsored by OBSSR and NIH
  • Greg Aarons
  • John Brekke
  • Nabila El-Bassel
  • Mark Fraser
  • Denise Juliano-Bult
  • Steve Schinke
  • Alan Zweben
Introductions
What is it?
SW interventions

• Interventions are *intentional change strategies* (Fraser)
  • Programs, treatments, policies
  • Individual, family, organization, neighborhood, community
  • Simple or complex, narrow or broad
SW Intervention research

• Scientific processes/methods of producing empirically-supported solutions for problems that social workers address

• Intervention research vs. evaluation research

• Efficacy vs. effectiveness

  • Efficacy is the extent to which an intervention does more good than harm when delivered under optimal conditions. Efficacy is distinguished from effectiveness, which refers to program effects when delivered under more real-world conditions.

Mark W. Fraser; Jack M. Richman; Maeda J. Galinsky; Steven H. Day. Intervention Research: Developing Social Programs
Challenging and tedious
So why do it?
Methods of Scientific Stages for Intervention Research

- Pilot Stage & Safety
- Efficacy
- Effectiveness
- Dissemination/Implementation
- Marketing
MRC Structural Framework for Development / Evaluation of RCTs for Complex Health Interventions

- Definitive RCT
- Long-term Implementation

- Theory
- Modelling
- Exploratory Trial

- Pre-clinical
- Phase I
- Phase II
- Phase III
- Phase IV
Stage Model of Behavioral Therapies Development (Carrol & Onken, 2005)

- **Stage I**
  - Pilot and feasibility testing of new treatments involving manual preparation, therapist training protocols, and treatment integrity procedures

- **Stage II**
  - Efficacy testing of promising fully developed treatments

- **Stage III**
  - Effectiveness testing of treatments in community settings involving issues of transportability, implementation and acceptability
Intervention Research Steps (Fraser)

- Specify problem, develop program theory
- Create and revise program materials
- Refine program components
- Assess impact in various settings
- Disseminate findings and program materials
Pilot studies

- Theory
  - Problem
  - Program—leverage?
- Model description and refinement (iterative, ongoing)
  - Manuals, rich description
- Test design for future efficacy study
  - Measures
  - Acceptability
  - Study design
    - Recruitment feasibility, randomization if indicated
  - Fidelity tools
    - Often multi-method
Efficacy studies

• Assess impact under controlled conditions
• Typically randomized trial or other strong design
• Adequately powered to detect intervention effects
• May be powered for sub-group analyses
• Intervention fidelity (integrity) is assessed
Effectiveness studies

- Assess impact of intervention in “real-world” setting
  - Representative service delivery sites
  - Intervention delivered by typical service delivery personnel
  - Quasi-experimental designs often employed
  - Administrative data often used to assess outcomes
- Cost-effectiveness may be included
  - Requires large sample
Ignaz Semmelweis (1818-1865)

Only 34% of healthcare providers follow appropriate “hand hygiene” procedures!


Implementation questions
Dissemination & Implementation Research

Dissemination
• “targeted distribution of information and intervention materials to a specific public health or clinical practice audience. The intent is to spread knowledge and the associated evidence-based interventions.”

Implementation
• “the use of strategies to introduce or change evidence-based health interventions within specific settings”

Source: National Institutes of Health PAR-10-038
Implementation Outcomes

Intervention Strategies
- Evidence Based Practices

Implementation Strategies
- Systems
- Environment
- Organizational
- Group/Learning
- Supervision
- Providers
- Consumers

Outcomes
- Implementation Outcomes
  - Fidelity
  - Reach
  - Acceptability
  - Sustainability
  - Uptake
  - Costs
  - Workforce

- Service Outcomes
  - Efficiency
  - Safety
  - Effectiveness
  - Equity
  - Patient-Centered
  - Timeliness

- Client Outcomes
  - Symptoms
  - Functioning
  - Satisfaction
  - Quality of Life

Proctor, Landsverk, Aarons, Chambers, Glisson, Mittman (2009); Proctor, Silmere, et al., (2011);
Common Implementation Research Questions

• How to test whether intervention effects are sustained as supports are lifted?
• How to increase the adoption of a program by communities as well as individuals?
• Does adaptation change outcomes?
• What support structures lead to successful implementation, high fidelity, and sustainability?
Trajectory does not always apply

- Order
- Gaps
- Failure to implement
- Incentives
Working with community providers

- Challenging
- Time-consuming
- Essential
Helicopter approach (Brekke)

- The agency as ‘good recruitment host’
- Little attempt to create real collaboration
- “We do our research thing, you keep doing what you do and we try to stay out of each others’ way.”
- Agency can feel like a victim: “you don’t call, you don’t write, what happened here?”
Partnered approaches

- Can vary by:
  - Leadership
  - Decision-making
  - Tasks
  - Accountability
- CBPR is one model
- All require investment!
teamwork!
Break?
CTI: from program innovation to model dissemination

Ezra Susser, Sally Conover, Elie Valencia, Alan Felix Jeff Olivet, Jeff Draine, Catie Willging, Beth Angell, Lisa Dixon, Richard Goldber, Graham Thornicroft, Judith Wolff, Bert Van Hemert

NIMH grants R-18-MH48041, R01MH59716
Fort Washington Armory
Men’s Shelter, 1990s
Pilot work

• Document needs
• Explore possible intervention strategies
• Reliance on clinical expertise
Transitions can result in **discontinuity of support**

- multiple complex needs
- loss of supportive relationships
- fragmented community services
CTI aims to solidify supports as it spans the period of transition
CTI differs from traditional case management

Time limited  Focused  Three phases
Phase One: Transition

Implement transition plan while providing emotional support

Pre-discharge connection
• Home visits
• “Introduce” clients to providers
• Meet with caregivers
• Substitute for caregivers

• Help negotiate ground-rules for relationships
• Mediate conflicts
• Assess potential of support system
Phase Two: Try-Out

Facilitate and test client’s problem-solving skills and capacity of the support system
• Monitor effectiveness of support system
• Modify as necessary
• Less frequent meetings
• Crisis intervention and troubleshooting
Phase Three: Transfer of Care

Terminate CTI services with support network safely in place
• Consultation but little direct service
• Ensure key caregivers meet and agree on long-term support system
• Formally recognize end of intervention and relationship
Focus areas

• Psychiatric treatment and medication management
• Finances
• Housing crisis management
• Substance use
• Family relationships
First efficacy trial
Susser and Valencia, co-PIs

Design

• randomized trial
• 100 men with SMI following discharge
• 9-month intervention/18-month follow-up
• NIMH special mechanism
Probability of retaining housing over follow-up period (n= 96)

Other Findings

- Reduction in negative symptoms, no impact on positive symptoms
- Severe substance use modified the effect of intervention on homelessness
- Total costs over 18 months similar in both groups
Next steps

- Adapt for hospital setting
- Pilot research (NARSAD)
- Feasibility
- Typical staff
CTI in the Transition from Hospital to Community

NIMH R01

- CTI vs. usual aftercare services
- Intervention delivered by state hospital workers (BA level)
- 9 month intervention, 18 month follow-up

- Recruitment from “transitional residences”
CONTROL GROUP

OUT OF CONTROL GROUP.
Inclusion criteria

• 18-59 years of age, English speaking
• DSM-IV psychosis
  • Schizophrenia spectrum disorder, depression with psychosis, bipolar disorder with psychosis, or psychosis not otherwise specified
• Homeless during 18 months preceding admission
• Planned discharge to NYC
Measures

- SCID diagnosis
- PANSS
- Continuity of care
- Quality of life
- Victimization
- Coercion
- Substance abuse
- Service use
- Housing status
Follow-up

- 150 had baseline interview
- 145 had first 6-week follow-up interview
- 129 completed 9 months of follow-up
- 116 completed 18 months of follow-up
# Demographic characteristics

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<thead>
<tr>
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<th>Total Sample</th>
<th>Experimental</th>
<th>Control</th>
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<tr>
<td>Male</td>
<td>71.3</td>
<td>67.5</td>
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<tr>
<td>Female</td>
<td>28.7</td>
<td>32.5</td>
<td>24.7</td>
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<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>18-29</td>
<td>22</td>
<td>24.7</td>
<td>19.2</td>
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<tr>
<td>30-39</td>
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<td>40-45</td>
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<tr>
<td>46 plus</td>
<td>20</td>
<td>18.2</td>
<td>21.9</td>
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<td>Ethnicity</td>
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<tr>
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<tr>
<td>Latino</td>
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<td>14.3</td>
<td>16.4</td>
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<tr>
<td>White</td>
<td>16.7</td>
<td>18.2</td>
<td>15.1</td>
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<tr>
<td>Other</td>
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<td>5.2</td>
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## Diagnosis

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<th>Diagnosis</th>
<th>Total Sample</th>
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<tr>
<td>Schizophrenia</td>
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<td>62.3</td>
<td>60.3</td>
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<tr>
<td>Schizoaffective</td>
<td>34.7</td>
<td>31.2</td>
<td>38.4</td>
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<tr>
<td>Other</td>
<td>4.0</td>
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### Substance abuse

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<th>Type</th>
<th>Total Sample</th>
<th>Experimental</th>
<th>Control</th>
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<tr>
<td>No use or dependence</td>
<td>10</td>
<td>10.4</td>
<td>9.6</td>
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<tr>
<td>Use w/o abuse or dependence</td>
<td>10</td>
<td>15.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Abuse w/o dependence</td>
<td>26.7</td>
<td>23.4</td>
<td>30.1</td>
</tr>
<tr>
<td>Dependence</td>
<td>53.3</td>
<td>50.6</td>
<td>56.2</td>
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## Lifetime homelessness

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<th></th>
<th>Total Sample</th>
<th>Experimental</th>
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<tbody>
<tr>
<td><strong>Times homeless</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>21.1</td>
<td>24</td>
<td>18.1</td>
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<tr>
<td>2 to 4</td>
<td>44.9</td>
<td>38.7</td>
<td>51.4</td>
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<tr>
<td>5 to 9</td>
<td>20.4</td>
<td>24</td>
<td>16.7</td>
</tr>
<tr>
<td>10 or more</td>
<td>13.6</td>
<td>13.3</td>
<td>13.9</td>
</tr>
<tr>
<td><strong>Longest episode</strong></td>
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<td></td>
<td></td>
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<tr>
<td>LT one week</td>
<td>9</td>
<td>9.3</td>
<td>8.6</td>
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<td>One week to 3 months</td>
<td>22.1</td>
<td>21.3</td>
<td>22.9</td>
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<tr>
<td>3 months to one year</td>
<td>29</td>
<td>25.3</td>
<td>32.9</td>
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<tr>
<td>One year or more</td>
<td>40</td>
<td>44</td>
<td>35.7</td>
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<td><strong>Age first homeless (mean)</strong></td>
<td>25.8</td>
<td>25.1</td>
<td>26.6</td>
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## Treatment history

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<td>9</td>
<td>13.2</td>
<td>4.3</td>
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<tr>
<td>Two to four</td>
<td>20.7</td>
<td>21.1</td>
<td>20.3</td>
</tr>
<tr>
<td>5 to nine</td>
<td>32.4</td>
<td>36.8</td>
<td>27.5</td>
</tr>
<tr>
<td>10 or more</td>
<td>38</td>
<td>28.9</td>
<td>48.8</td>
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<table>
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<tr>
<th>Outpatient commitment</th>
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<tr>
<td>Current or pending</td>
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<td>6.6</td>
<td>9.8</td>
</tr>
<tr>
<td>Past</td>
<td>6.1</td>
<td>6.6</td>
<td>5.6</td>
</tr>
<tr>
<td>Never</td>
<td>85.7</td>
<td>86.8</td>
<td>84.5</td>
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</table>
## Criminal justice involvement

<table>
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<th>Times in jail or prison</th>
<th>Total Sample</th>
<th>Experimental</th>
<th>Control</th>
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<tbody>
<tr>
<td>None</td>
<td>21.4</td>
<td>20</td>
<td>22.9</td>
</tr>
<tr>
<td>One</td>
<td>26.9</td>
<td>29.3</td>
<td>24.3</td>
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<tr>
<td>2 to 4</td>
<td>29</td>
<td>33.3</td>
<td>24.3</td>
</tr>
<tr>
<td>5 or more</td>
<td>22.3</td>
<td>17.3</td>
<td>28.6</td>
</tr>
<tr>
<td>Currently on probation or parole</td>
<td>6.1</td>
<td>6.5</td>
<td>5.6</td>
</tr>
</tbody>
</table>
Percent of subjects who were homeless over follow-up period (ITT)

OR = 0.22 (0.06, 0.88)

Herman et al. 2011
Percent of subjects who were homeless over follow-up period (as treated)

OR = 0.10
(.03, .35)
Percent of subjects who were hospitalized over follow-up period (ITT)

OR = 0.11 (.01, .96)

Tomita and Herman 2012
Challenges

- 9/11
- Discharge practices changed significantly
- Reduced commitment of state resources
- “Rossi’s Law”
625 SCREENED

475 EXCLUDED
- 259 Ineligible
  - 156 not homeless before hospital admission
  - 71 other ineligible
  - 32 not discharged to NYC
- 93 Refused
- 123 Missed

150 RANDOMIZED

77 EXPERIMENTAL
- 11 refused
- 8 lost

73 CONTROL
- 7 refused
- 5 lost
- 2 deceased

58 COMPLETED FOLLOWUP
59 COMPLETED FOLLOWUP
Collaboration challenges

• “Research time” vs. “services time”
• Changes in system of care
  • “Rolling” study design
• Changes in external environment
  • Budget
  • Housing supply
Why did collaboration succeed?

- Timing
- Familiarity with service settings
- Addressed local institutional needs
- Demonstrated efficacy
- Pilot work carried out on-site
- Personal relationships with key players
Proposed jail discharge study

- Post-jail services for persons with SMI
- “Brad H.” case
Why did collaboration fail?

- Timing
- Research design
- Legal oversight
- Political concerns

December 23, 2003

Report Faults City on Health Care for Mentally Ill

By PAUL von ZIELBAUER

Nearly a year after signing a court settlement to provide a post-jail health care plan to mentally ill inmates scheduled for release, New York City health officials have failed to fulfill many of its most basic requirements, like scheduling doctor appointments and completing Medicaid applications, according to a report by court-appointed monitors.
VA Homeless (Kasprow et. al, 2007)

Design

- “Effectiveness” trial
- Non-randomized pre-post design
- Multiple sites nationally
- N=484

Results

- 19% more days housed over one year
- 14% fewer days in institutions
- No difference on homeless days
- Lower ASI drug, alcohol and psychiatric problem scores
adapting the model
Diffusion

NREPP SAMHSA's National Registry of Evidence-based Programs and Practices

The Coalition for Evidence-Based Policy
Training Partners

CUCS
Center for Urban Community Services
Rebuilding lives together

Center for Social Innovation
Translating Research. Transforming Human Services.

We build communities of practice whose members learn from one another by sharing information and experiences.
Argentina
Australia
Brazil
Canada
Chile
Netherlands
South Africa
United Kingdom
Dissemination challenges

- Fidelity vs. adaptation
- Funding?
- Free spread vs. tight control?
- Open source software?
- How to train and support implementation?
Evidence-Based Practice in Community-Based Social Work: A Multi-Media Strategy

Contract HHSN271200800027C
Final Report

Center for Social Innovation
After 20 years of work

- Dissemination
- Black box problem
- How can model be changed/improved?
- Influence of contextual factors/environment
- Other?
CTI is an empirically supported, time-limited case management model designed to prevent homelessness and other adverse outcomes in people with mental illness following discharge from hospitals, shelters, prisons and other institutions. CTI was originally developed and tested by researchers and clinicians at Columbia University and New York State Psychiatric Institute with significant support from the National Institute of Mental Health and the New York State Office of Mental Health. The model is listed in the National Registry of Evidence-Based Programs and Practices and is currently being applied and tested in the US and abroad.

Continuing research and dissemination activities are now centered at the CTI Global Network, based at the Silberman School of Social Work at Hunter College in New York City. Download a four-page handout here.

The Center for Social Innovation’s online CTI course for Spring 2013 begins on Wednesday March 6th

This 5-session instructor-led course will give your agency the tools it needs to implement CTI. It brings together national CTI experts, a team-based learning approach, and engaging multimedia technology. The course covers CTI principles, evidence for CTI, phases of CTI, and skills for implementation.

Read flyer to learn more. To register, click here.

New project launches in North Carolina

The University of North Carolina School of Social Work has launched a CTI project that will provide services to over 200 persons with severe mental illness in Orange and Chatham counties. Led by faculty members Barbara B. Smith and Gary Guddeback, the three-year project is also intended to promote the
Developmental grant mechanisms

- R03
  - 2 years
  - $100k direct costs
  - Pilot or feasibility, secondary analysis, new methods

- R21
  - 2 years
  - $275k direct costs
  - Exploratory and novel, break new ground

- R34
  - 3 years maximum,
  - $450k direct costs
  - Most frequently used for intervention studies
I told you that you weren’t coming with us, Nicole! Mom and Dad are using you as the control group. They want to see if taking kids on vacation makes them happier as adults.
The purpose of this Notice is to provide clarification of the research objectives of PAR-06-248 “From Intervention Development to Services: Exploratory Research Grants (R34).” This funding opportunity announcement (FOA) is intended to encourage research on: 1) the development and/or pilot testing of new or adapted interventions; 2) pilot testing interventions with demonstrated efficacy in broader scale effectiveness trials; or 3) innovative services research directions that require preliminary testing or development. This FOA seeks to encourage applications that will provide resources for evaluating the feasibility, tolerability, acceptability, and preliminary safety of novel approaches to improving mental health and modifying health risk behavior, and for obtaining the preliminary data needed as a pre-requisite to a larger-scale intervention (efficacy or effectiveness) or services study.

Investigators have often used the R34 mechanism to go beyond the goals of examining feasibility, safety, acceptability, and tolerability. Although collection of preliminary data regarding these parameters is advised, attempting to obtain an estimate of an effect size is not an intended outcome. The variability in the effect sizes obtained, given the limited sample sizes typically supportable under this mechanism, is often so large as to be unreliable. Using these potentially unstable effect size estimates in power calculations for larger studies, without regard to clinical meaningfulness, is not advisable.

Intervention studies submitted in response to PAR-06-248 do not necessarily need to be scaled down Randomized Controlled Trials (RCTs) that propose formal tests of intervention outcomes, but rather should propose the developmental work to be performed that would enhance the probability of success in a larger trial. This is best done by working out the details of the experimental protocol (including the assessment protocol, the experimental intervention protocol, the comparison intervention protocol, and randomization procedures, if appropriate), examining feasibility of recruiting patients into the study conditions (including the experimental condition(s) and the comparison condition, if relevant), and developing supportive materials and resources.

Services studies that propose non-RCT designs do not need to be a reduced scope version of a planned larger study, but should instead attempt to develop and refine the research tactics to be utilized in the more definitive study.
Determining Institute Priorities

• Mission Statement

• Special Reports / Task Forces / Strategic Plan

• Larger Scale Issues
  • Departmental Initiatives
  • Controversies in the Literature
  • Topics in the News

• Contact a Program Officer
General advice

• Both idea and approach (methodology) are CRITICAL!
• Layout matters – not too small type, margins, vertical blank space
• Proofreading and editing count for a lot!
• Abstract is extremely important
• Assume that reviewer is not an expert in your area
• Better to hold off than to submit a product that is not strong
Assignment

- Role of Program Officer vs Scientific Review Officer
- Talk to PO well before you submit
- Getting your application to the right study section is YOUR job!
Inside the study section meeting

- Three or more reviewers
  - 95% of written review completed prior to meeting, together with prelim impact score and final criterion scores
  - Impact is rescored at meeting
- Only top half are discussed and scored
- Most discussion is between assigned reviewers
- Roughly 15 minutes per application!
Peer review scoring system

• Overall score AND individual criterion scores
• Criterion scores
  • Significance
  • Approach
  • Innovation
  • Investigator
  • Environment
Specific Review Criteria

**Significance:** Problem is important; Results advance science or practice; Study expands concepts, methods, technologies, treatments, services, or interventions

**Approach:** Conceptual or clinical framework, design, methods, and analyses are adequately developed, well-integrated, well-reasoned, & appropriate to aims; Applicant notes potential problem areas and considers alternative tactics

**Innovation:** Study is original and innovative: challenges existing paradigms or practices; addresses an innovative hypothesis or critical barrier to progress; develops or employs novel concepts, approaches or methods, tools, technologies

**Investigators:** Key personnel are appropriately trained and capable; Work is appropriate to their experience; Team has complementary and integrated expertise

**Environment:** Contributes to probability of success; Benefit from unique features of environment, population, or collaborative arrangements; Institutional support
Scoring

- **Impact:** sustained, major influence on field
- **Significance:** relevance to field
- **Investigators:** qualified or not
- **Approach:** methodology
- **Innovation:** pushing the field
- **Environment:** setting and resources, especially important for new investigators
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<th>Score</th>
<th>Descriptor</th>
<th>Guidance on Strengths/Weaknesses</th>
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<tbody>
<tr>
<td>1</td>
<td>Exceptional</td>
<td>Exceptionally strong with essentially no weaknesses</td>
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<tr>
<td>2</td>
<td>Outstanding</td>
<td>Extremely strong with negligible weaknesses</td>
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<tr>
<td>3</td>
<td>Excellent</td>
<td>Very strong with only some minor weaknesses</td>
</tr>
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<td>4</td>
<td>Very Good</td>
<td>Strong but with numerous minor weaknesses</td>
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<tr>
<td>5</td>
<td>Good</td>
<td>Strong but with at least one moderate weakness</td>
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<tr>
<td>6</td>
<td>Satisfactory</td>
<td>Some strengths but also moderate weaknesses</td>
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<td>7</td>
<td>Fair</td>
<td>Some strengths but with at least 1 major weakness</td>
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<tr>
<td>8</td>
<td>Marginal</td>
<td>A few strengths and a few major weaknesses</td>
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<tr>
<td>9</td>
<td>Poor</td>
<td>Very few strengths &amp; numerous major weaknesses</td>
</tr>
</tbody>
</table>

Minor Weakness: An easily addressable weakness that does not substantially lessen impact  
Moderate Weakness: A weakness that lessens impact  
Major Weakness: A weakness that severely limits impact
What Matters

- Impact score determines percentile (against other apps scored by same SS); percentile determines funding, mostly.
- Significance and Innovation are important, but largely categorical (low, medium, high)
- Approach (methodology) has big effect on impact score
- Human subjects protections and data safety management protocols are discussed before scoring; these can seriously affect score if done poorly
Resubmitting your grant

- How to decide whether to resubmit?
- Address every negative comment in introduction
  - Don’t waste space on positives
  - Second review will be guided by first review
- Use experience consultants as pre-reviewers
Significance: weaknesses

• Applicant proposes to replicate their previous study (conducted with persons being discharged from a homeless shelter) at a public psychiatric hospital. The rationale for this as the next step in their research agenda is not clearly stated since it is unlikely that this model would be funded widely as an add-on to the existing hospital discharge system.

• It remains unclear whether the intervention could be implemented in the kinds of settings where typical clients seek treatment. The types of providers and the demands on their time have not been clearly described, so it is unclear whether broad uptake would be possible should the intervention prove effective.
• Focusing on the relevant micro-level interpersonal processes is of great importance to understanding social integration and informing theory. However, the potential for the results of the proposed study to inform the development of services and interventions is not made evident.

• Pilot research reported by applicants suggests difficulty in engaging minority participants in the intervention. How will this problem be addressed by the current study?
Approach: weaknesses

- A single-session intervention may not be adequate to produce desired behavioral change outcomes.

- It is not clear how the underlying theoretical frameworks are integrated to inform the intervention. Specifically, how will session content (information, motivation, behavioral skills) be tailored to the stage of readiness to change?

- Additional procedural detail is needed, ex: the application states that all that all contacts by patients will be responded to immediately. How? Through what service infrastructure?
• It is doubtful that the project can be completed within the proposed two year timeframe and within the modest budget because, despite reliance on the use of administrative data collection, there is still a massive amount of data to be collected, cleaned and analyzed.

• The rationale for conducting the study in three geographically dispersed locations is not clear.

• Outcome measures are not well-justified. In particular, it is not clear why the investigators would expect to see change in measures of symptoms and broad level of functioning resulting from the limited intervention described.
Investigator: weaknesses

• The PI has limited experience in leading a study of this scope
• The PIs track record for publishing seems sparse for this stage in his/her career. This raises concerns about productivity.
Selected Resources

• Fraser, Richman, et. Al. Intervention Research: Developing Social Programs, Oxford (2009)

• Solomon, P., Randomized Controlled Trials: Design and Implementation for Community-Based Psychosocial Interventions, Oxford (2009)

• OBSSR/NIH Summer Institute on Social and Behavioral Intervention Research
  http://obssr.od.nih.gov/training_and_education/annual_Health_Services_Research_on_social_work/hsr.aspx
Dissemination and Implementation

NIMH Implementation Research Institute (IRI)
Two year fellowship with mentoring [link]

NIH Conference on the Science of Dissemination and Implementation
Annual conference with latest findings from implementation research studies [link]

NIH Training Institute on Dissemination and Implementation Research in Health
Annual week long training – cross institute [link]

Seattle Implementation Research Conference (SIRC)
Every other year through 2015 [link]

VA Center for Implementation Practice Research and Support (CIPRS)
While focused on the VA – many issues and principals are relevant for implementation in general [link]