Evaluating active living environment and policy changes in communities: Concepts, strategies and methods

Larry Green & Judith Ottoson
Laura Brennan Ramirez & Cheryl Kelly
February 22, 2007

Active Living Research Conference
Session Overview

- Introductions: Larry, Judith, Laura & Cheryl
- Audience assessment
- Overview of seminar
- Larry & Judith
  - Kaiser Foundation
  - ALR grantees
- Laura & Cheryl
  - RWJF ALbD initiative
- Discussion/questions
- Interactive agenda setting: evaluation of environment and policy initiatives
  - Advancing research
  - Advancing practice
Evaluation Team

- Internal Project Team
  - PI: Laura Brennan Ramirez, PhD, MPH (Transtria)
  - Project Manager: Cheryl Kelly, PhD, MPH (Transtria)
  - Co-I: Ross Brownson, PhD (Saint Louis University School of Public Health)

- Evaluation Consultants
  - Beth Baker, PhD, MPH (Saint Louis University School of Public Health)
  - Kelly Evenson, PhD (University of North Carolina)
  - Susan Handy, PhD (University of California – Davis)
  - Jim Sallis, PhD (San Diego State University)
  - M. Katherine Kraft, PhD (Independent Consultant)
Evaluation Team

- Active Living by Design
  - Sarah Strunk, MHA (Director)
  - Richard Bell, MCP (Project Officer)
  - Phil Bors, MPH (Project Officer)
  - Helen Mahan (Project Officer)
  - Omisade Burney-Scott (Project Officer)
  - Mark Dessauer (Communications Officer)

- Robert Wood Johnson Foundation
  - Laura Leviton, PhD (Senior Program Officer)
Evaluation Initiative

- 3 year evaluation (start November 1, 2006)
  - 25 communities across the U.S. (intervention activities)
  - ALbD National Program Office (technical assistance to communities)
  - RWJF Funding ($200,000 over five years)

- Guided by the ALbD Action Model
  - Preparation
  - Promotions
  - Programs
  - Policy influence*
  - Physical projects*
## Active Living by Design Action Model

### Supports
- RWJF
- ALbD
- Grantee Communities

### Strategies
- Preparation
- Promotions
- Programs
- Policy Influence
- Physical Projects

#### Short Term Changes
- Community Mobilization
- Increased citizen involvement
- Emerging Leaders
- Media coverage
- Prompts to action
- Community Events
- Enhanced Awareness
- Safe Routes to School
- Commuter Choice
- Incentive-based Campaigns
- Bike/Ped Clubs
- Master Plans, e.g. Land Use, Transportation, Ped/bike, Greenway
- Organizational Policies
- Codes/Ordinances
- Signage
- Street Lighting
- New Trails

#### Intermediate Changes
- Social Support
- Institutionalization
- Change professional practice
- Standardized programs in communities, schools, worksites,
- Consistent policies across settings
- Safe, convenient, and integrated facilities

### Health & Lifestyle Changes
- Physical Activity
  - Obesity
  - Diabetes
  - High B/P
- Heart Disease
- Stroke
- Cancer
Community Partnerships (CPs)

- 25 Communities
  - CP received $200,000
  - Populations such as children, adults, African Americans, Native Americans, Latinos, lower income
  - Settings such as communities, schools, parks, worksites
  - Activities to address community design, land use, transportation, architecture, trails
  - Influence both recreation- and transportation-related physical activity
RWJF Evaluation Philosophy

- To learn from a program, policy, or strategy.
  - How to improve the program
  - What works under what circumstances
  - An evidence base for:
    - social change
    - practice in the field
    - Foundation grantmaking
- The goal is to inform the field.
- To learn, we need collaboration.
  - Intellectual collaboration
  - Planning and logistics
Audiences for the Evaluation

- “The field” – the policy and built environments that promote physical activity
- Other funders and co-funders
- Grantees – for sustainability
- The Foundation Board of Trustees
- Foundation Staff
- The ALbD NPO
Evaluation Means Assigning Value

- To policies and environments
- To programs
- To practices

- Systematic inquiry
- Often research, might not be
- Conclusions justified by a standard of evidence
Evaluation Is Not

- Auditing
- Spying
- Grading
- Spin
The Evaluation Approach

Three components:

1. **ALR-funded studies** in two communities (Columbia, Somerville)
   - Comprehensive, local investigator-initiated with Project Director involvement and support
   - Launch in January 2007

2. **Policy case studies** in five communities (Albuquerque, Bronx, Louisville, Sacramento, Wilkes-Barre)
   - Led by Larry Brown, Columbia University
   - Launch in November/December 2006

3. **Cross-site evaluation** in all communities (at varying levels)
   - Led by Laura Brennan Ramirez and Cheryl Kelly, Transtria LLC
   - Launch in November 2006
## ALBD Evaluation

<table>
<thead>
<tr>
<th>ALbD Communities</th>
<th>ALR awards</th>
<th>Brown Case Studies</th>
<th>Brennan Ramirez Pre/Post</th>
<th>Brennan Ramirez Cross-Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Bronx</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Buffalo</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Chapel Hill</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Charleston</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Chicago</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Cleveland</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Columbia</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denver</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Honolulu</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Isanti</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Jackson</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Louisville</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Nashville</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Oakland</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Omaha</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Orlando</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Portland</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sacramento</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Santa Ana</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Seattle</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Somerville</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Valley</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Wilkes-Barre</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Winnebago</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Evaluation Aims

- Assess the environmental impacts of physical projects and related policy changes (physical activity behavior, if possible)
- Document interventions implemented and intended/unintended consequences
- Identify strengths and challenges in planning, developing and implementing interventions
Evaluation Aims and Methods

- **AIM #1**: Assess the environmental impacts of physical project and related policy changes (physical activity behavior, if possible)
  - For communities that have implemented physical projects:
    - Document implementation through environmental audits and direct observation of community members’ behaviors
  - For communities that have plans to implement physical projects, including Cleveland, Seattle, Winnebago, Orlando, Santa Ana and Albuquerque
    - Document pre- and post-observations through audits and direct observation of community members’ behaviors
Pre/Post Evaluation

- Selection Criteria
  - Stage of intervention (before physical changes to environment)
  - Evidence of a policy and environmental intervention
    - Contract for work in place
    - Time frame for project completion
  - Focus of intervention (transportation or recreation)
  - Population (vulnerable populations, children)
  - Policy and environment focus
Evaluation Aims and Methods

- AIM #2: Document interventions implemented and intended/unintended consequences
  - Collect and analyze data from existing sources
    - PRS, Officer diaries, grantee reports
    - Examples: resources generated, percent of benchmarks achieved
  - Conduct key informant interviews with grantees and ALbD staff
  - Assess organizational capacity through an on-line survey conducted by key informants
  - Focus groups during site visits with staff, partners and community members
Existing Data

- Information exchange (August 2006)
  - Reviewed each CP and progress to date
  - Examined the ALbD Progress Reporting System (PRS)
- Existing evaluation reports of years 1 and 2
  - Kelly Evenson summary
  - ALbD summary
- CP documents (e.g. workplans, budgets)
- ALbD Lessons Learned
Key Informant Interviews: Themes

- Community Partnership’s Maturity
  - Why established? How long?

- Multidisciplinary Partnership
  - Agencies/organizations/individuals involved?
  - Political support?
  - Community member participation?

- Lead Agency
  - Agency established in community?
  - Support for the partnership?
Key Informant Interviews: Themes (continued)

- Community Partnership Characteristics
  - Strengths of partnership? Leadership? Support?
  - Challenges of partnership? Participation? Resources?

- Financial Resources of Community Partnership?
  - Funding outside of ALbD?
  - Factors contributing to securing other funds?
  - Challenges in seeking additional resources?

- Sustainability of Community Partnership?
  - Plans for sustaining efforts after ALbD funding ends?
  - Future sources of funding?
Key Informant Interviews: Themes (continued)

- **Staff**
  - How leadership was selected? Leadership paid employee or volunteer?
  - Changes in leadership? Why? Impact on partnership?
  - Skills and expertise of staff?

- **Other**
  - What would you do differently (starting over)?
  - Advice for other communities?
  - Benefits of partnership to addressing 5 P’s?
Organizational Capacity Tool

- Partnership purpose and goals
  - Goals defined? Address community needs?

- Partnership functioning
  - Core leadership? Procedures defined? Organized mtgs?

- Partnership leadership
  - Adequate skills? Trust in leadership? Relationship with public officials?

- Partnership resources
  - Space? Equipment?

- Partnership and community served
  - Variety of community groups? Community knowledge about partnership?
Focus groups

- Describe populations and settings
  - Disadvantaged? Children? Schools? Parks?
  - Population changes? Challenges? Reach?

- Identify physical projects, policy changes, programs and promotions
  - Steps taken? Facilitators? Barriers?
  - Efforts not successful? Why?
  - Biggest impact on the community?

- Technical assistance from ALbD staff
  - Type? Satisfaction with ALbD staff? Satisfaction with PRS?
Evaluation Aims and Methods

- AIM #3: Identify strengths and challenges in planning, developing and implementing interventions
  - Use concept mapping
    - Focus prompt: “One specific action or change in your community to support active living is…”
The Concept Mapping Process

Plan: Develop a **Focus** and **Identify** Participants

- **Focus**: e.g. “One thing that we are doing or could do in our setting that would more effectively integrate research with
  - Understand the capacity of practitioners to use an evidence base. (5)
  - Embrace tenure track models that promote a better integration of practice with research. (46)
  - Conduct additional research into effective methods of dissemination. (49)
  - Reward practitioners who incorporate science into their practice. (57)
  - Implement pay-for-performance reimbursement based on measures derived from evidence-based guidelines. (65)
  - etc.

- **Identify** Participants:
  - 275 Invited to Brainstorm & Rate (101 brainstormed; 95 Rated);
  - 75 Invited to Sort (36 Sorted)

- **Focus**:
  - e.g. “One thing that we are doing or could do in our setting that would more effectively integrate research with

- **Identify** Participants:
  - 275 Invited to Brainstorm & Rate (101 brainstormed; 95 Rated);
  - 75 Invited to Sort (36 Sorted)

- Understand the capacity of practitioners to use an evidence base. (5)
- Embrace tenure track models that promote a better integration of practice with research. (46)
- Conduct additional research into effective methods of dissemination. (49)
- Reward practitioners who incorporate science into their practice. (57)
- Implement pay-for-performance reimbursement based on measures derived from evidence-based guidelines. (65)
- etc.

Integrate and Produce Reports

- **Aggregate Sort Data**
- **Multidimensional Scaling**
- **Hierarchical Cluster Analysis**
Conceptually similar ideas are in close proximity.

Embrace tenure track models that promote a better integration of practice with research. (46)

Reward practitioners who incorporate science into their practice. (57)

Implement pay-for-performance reimbursement based on measures derived from evidence-based guidelines. (65)
Ratings: We ask participants …

Importance:

• To rate each item according to how important they think each item is to the ALbD initiative in their community, compared to the rest of the items.

• Use the following scale:
  1 = Relatively unimportant
  2 = Somewhat important
  3 = Moderately important
  4 = Very important
  5 = Extremely important
Comparison across populations

Low Income

High Income

Physical Health Road Blocks

Neighborhood Safety

Law Enforcement

Facility Access

Children

Individual Barriers

Facility Access

Children

Individual Barriers

Neighborhood Safety

Law Enforcement

Physical Health Road Blocks

4.09

4.04

r = .98

3.29

3.29
We are Now in the Brainstorming Stage....

**Plan:** Develop a **Focus** and **Identify** Participants

**Generate (Brainstorm) Ideas:** all participants

**Structure Ideas:** all participants *rate* and a subgroup completes a conceptual *sort*

**Compute Maps** and **Produce Reports**

**Interpret** and Utilize Maps
Timeline

  - 4 sites will be asked to participate in audits/photos, focus groups, interviews, and concept mapping
  - 6 sites will be asked to participate in pre-test activities, focus groups, interviews, and concept mapping

- Year Two (11/1/2007 – 10/31/2008)
  - 10 sites will be asked to participate in audits/photos, focus groups, interviews, and concept mapping

- Year Three (11/1/2008 – 10/31/2009)
  - 3-5 sites will be asked to participate in audits/photos, focus groups, interviews, and concept mapping
  - 4-6 sites will be asked to complete post-assessment
Products and Deliverables

- Summary
  - Across all sites
  - Recommendations for building community design initiatives
    - Policy, environment, promotion and program interventions
    - Emphasis on children and relatively disadvantaged populations
  - Evidence of changes to the community environment (audit data, photos) and, when feasible, the impact on behavior

- Reports
  - Each site and ALbD program office
  - Document successes and challenges, what worked well, what did not work so well
    - Community partnerships, technical assistance, impact of start-up resources
Grantee Benefits from Evaluation

- Collaborate on evaluation questions
- Evaluation *may* help with sustainability
  - through other funding sources
- Timely feedback and data sharing
  - for process data, very feasible
  - for outcomes, *be patient*
Agenda Setting Activity

- Evaluation of environment and policy initiatives from the RESEARCH perspective
  - What are our research questions?

- Evaluation of environment and policy initiatives from the PRACTICE perspective
  - What are our research questions?