Title Slide: Time Issues in Multilevel Interventions for Cancer Treatment and Prevention

Jeffrey Alexander, Ph.D. Irene Prabhu Das, Ph.D. Timothy P. Johnson, Ph.D.

National Cancer Institute
U.S. Department of Health and Human Services
National Institutes of Health

Slide 2: Key Assumptions

- Individual subjects of MLIs are not static they change systematically in ways unrelated to the intervention and in ways that may increase or decrease the effects of the intervention
- Organizations or environments do not operate in steady state mode they change in ways that may impact the fidelity of the intervention and its effects on patients

Slide 3: Time as the Third Dimension of MLIs

- Vertical relationships among levels in MLIs affected differently by change, or temporal stage of development in these levels
- Concept of time adds an additional dimension to multilevel models and interventions levels, cross-level, time
- Complex set of program design and evaluation challenges in MLIs become more complex with the addition of temporal elements

Slide 4: Two dimensions of MLIs: Level and Inter-level

[image]

Pyramid divided into three sections. The base is Individual, the middle is Organization and the top is Environment. Each section is connected to the one above it with a bidirectional arrow.

Slide 5: Third Dimension of MLIs: Time

[image]

Pyramid divided into three sections. The base is Individual, the middle is Organization and the top is Environment. Each section is connected to the one above it with a bidirectional arrow.

Each section of the pyramid has an extension on its side and this defined as time. Each time section is connected to the one above it with a bidirectional arrow.

[End image]

Slide 6: Where Does Time Fit in MLI Evaluation and Program Design?

- Patient level time as a level embedded within individual patients
- Organizational level
- Environmental level
- Interaction of time issues across levels

Slide 7: Four Time Issues Addressed in the Paper

- Role of disease life course and growth trajectories in multilevel interventions
- Approaches to incorporating time in research and program design for multilevel interventions
- Analysis of time using multilevel data
- Resource considerations of incorporating time as a dimension of multilevel interventions and research

Slide 8: The Big Question

How does time potentially affect relationships across levels in multilevel interventions?