Slide 2: Important Issues for Multilevel Research

- **Logical approaches are not always effective**
  e.g., health risks are poor long term motivators of behavior change (emphasizing smoking or obesity risk does not lead to long term behavior change
- **Effective approaches to behavior change are complex and difficult**
  e.g. changing culture is effective but very difficult.
  Will multi-component interventions be more successful in making sustained behavior changes because they are synergistic?

Slide 3: Important Issues (con.)

- Effective interventions must be “evidence-based, economically feasible, and consistent with community values…”, and they must remain that way after implementation.
- Attenuation of effects - initial change is not beneficial unless it is sustained
- Firm and sustained commitment of participating organizations - e.g. 3W worksite study

Slide 4: Challenges to Multilevel Intervention Research

- Interventions must not neglect what is clearly effective because it is difficult to achieve.
- Example: HEDIS implementation
- Critical importance of:
  1. Sustained commitment
  2. Appropriate Budget
3. Accountability

Slide 5: New Opportunities for Multilevel Research

1. Explore extraordinary opportunities arising from the explosion of longitudinal comprehensive electronic medical records (EMR)
   - multiple measures over time
   - comprehensive co-morbidity & health care utilization information
   - linkages across practices and health systems
   - total populations numbered in millions
   - opportunities for feedback and intervention at organization, clinician, patient levels (e.g. Stevens HIT study)

Slide 6: New Opportunities for Multilevel Research

2. New design & statistical approaches - Hierarchical models, propensity or instrumental variables are good approaches, but new methods designed for EMR systems should be developed.

3. Need to standardize coding practices and methods for merging data across systems (e.g., CRN and VDW) to facilitate rapid, accurate, and inexpensive merging of health record data across healthcare systems