

Title Slide: Discussion of Section I Papers

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Slide 2: Section 1 Discussion

- Highlight key points of each paper
- Discuss crosscutting themes, issues, challenges
- Recommend questions for discussion

Slide 3: Paper 1: Multilevel Interventions in Health Care: Building the Foundation for Future Research

Stephen Taplin, MD, MPH
Steven Clauser, PhD
Rebecca Anhang Price PhD
Erica Breslau PhD
Veronica Chollette MS RN
Heather Edwards PhD
Pebbles Fagan PhD
Mary Fennell PhD
Mary Foster PhD
Irene Prabhu Das PhD
Jane Zapka ScD

Slide 4: Paper 1 overview

- Provides a framework for understanding multilevel influences and identifying intervention targets

- Provides definitions of key terms
- Describes the intent: to better *understand and influence* the interplay of forces at multiple levels that affect health and healthcare
- Proposes desired measures of success (based on AHRQ's and IOM's definition of quality care) across the cancer care continuum
- Articulates a key research question: How do the levels of influence affect each other and the processes of health care delivery and health outcomes ?

Slide 5: Multilevel Factors Impacting Quality: Examples from the Cancer Care Continuum

Jane Zapka ScD
 Stephen Taplin, MD, MPH
 Patricia Ganz, MD
 Eva Grunfeld, MD, DPhil
 Katherine Sterba, PhD

Slide 6: Paper 2 Overview

- Describes case studies and hypothetical interventions at different levels
- Uses cases to illustrate complexity & types of multilevel interventions
- Identifies intervention targets and potential intervention strategies at the state health policy level, organizational level, provider and family support levels.
- Discusses challenges in designing studies to determine impact of different components at different levels

Slide 7: State-of-the-Art and Future Directions in Multilevel Interventions across the Cancer Control Continuum

Erica S. Breslau, PhD
 Allen J. Dietrich, MD
 Russell E. Glasgow, PhD
 Kurt C. Stange, MD, PhD
 All authors contributed equally to the manuscript and are listed alphabetically

Slide 8: Paper 3 Overview

- Literature review on multilevel intervention research, including articles from cancer control, chronic disease and prevention literature
- Identifies opportunities related to design, analysis, and translation; and especially for interventions that create synergy across levels, attend to context, and adapt over time.
- Describes 4 examples to show potential
- Concludes that transdisciplinary participatory research can generate knowledge to reduce cancer burden

Slide 9: Crosscutting Issues, Themes, and Challenges

No content

Slide 10: Opportunities for research on MLI across the cancer care continuum

- Cancer is a good model for evaluating multilevel influences on health care quality; it includes several *types of care* and *transitions* between types of care from prevention through end of life
- The types of care (screening, diagnosis, treatment) include process steps and individuals across levels that interact and influence the quality of care
- Challenge: to design interventions that improve care for patients at different points across the continuum yet are sustainable, flexible, and generalizable enough to impact population groups

Slide 11: Gaps in multilevel intervention research

- Across the cancer control continuum, most multilevel interventions have focused on prevention, screening, and end of life, but seldom on diagnosis, treatment, and surveillance.
- There are few detailed reports of *how* multi-level interventions have been implemented, and how they have become successful or unsuccessful
- Theory, models and interventions are not well integrated in reports/studies.

Slide 12: Gaps in multilevel intervention research

- While many studies use ecological, systems, and complexity models, few applied theory to inform interventions; few measured impacts at multiple levels.
- Multilevel interventions are contextual, but context is reported inadequately in most reports.
- More work needed on measuring effect of contextual factors on intervention outcomes
- No clear guidance on types of interventions strategies for various levels
- Need for Evidence: Effectiveness of multilevel interventions not yet evidence-based

Slide 13: Theory

- Existing theories that can be helpful:
 - Social Cognitive Theory
 - Organizational theory such as Stage Theory
 - Network theory
 - Theory of complex adaptive systems
 - Practical Integrated Systems Model (PRISM)
 - RE-AIM
- Planning:
 - PRECEDE-PROCEED
 - Intervention Mapping

“No single theory has been developed to explain complex relationships between contextual factors & the behavior of those providing or seeking care”
(Paper 1 p4)

Slide 14: Design and Analysis (Challenges)

- The current paradigm in which level-specific theories drive level specific interventions and measurement is inadequate.
- Like multifaceted interventions– it may not be possible to determine which elements (or levels) of multilevel interventions are the most important or effective.
- Studies are needed to test whether multi-level interventions have a greater effect than intensive interventions at a single level (comparative effectiveness research)

Slide 15: Design and Analysis (opportunities)

- Dynamic, adaptive, designs that evolve over time and pay attention to contextual factors and multilevel interactions
- Multilevel statistical methods and models allows measurement and comparison of different levels of influence
- Use of multimethod approaches (qualitative and quantitative methods) is promising
- Complex systems and dynamic simulation modeling
- Training and research partnerships need to be much more transdisciplinary, inclusive, democratic, and participatory

Slide 16: Multilevel Interventions and Dissemination and Implementation Research

- Discovery of improvements in isolated steps of care (reductionist approach) does not lead to their incorporation into care
- Incorporating interventions into care may lead to unexpected results because context was not taken into account
- Conceptual models and frameworks that have been suggested for informing research on MLI are also used for dissemination and implementation research
- Some fundamental differences between MLI research and Dissemination and Implementation research

Slide 17: Multilevel Influences on the Cancer Care Continuum

To address the complexity of multi-level influences, we must develop intervention approaches to change the behavior of people in the environment (e.g. providers, clinic directors, decision-makers).

[image]

Shows an ellipse with 7 concentric ellipses inside it. All the ellipses come together at the bottom to out a different section. Starting from the outermost ellipse to inner most, the sections are as follows:

- National Health Policy Environment
- State Health Policy Environment
- Local Community Environment
- Organization and/or Practice Setting
- Provider/Team
- Family & Social Supports
- Individual Patients

Individual Patients go Improve Quality of Cancer Care and then to Improved Cancer-Related Health Outcomes.

[End image]

Slide 18: Questions

- What is a level; how does it differ from a mechanism; does it matter?
- How can models and terms from across disciplines be used in a multilevel framework?
- How can multilevel studies be used in health care reform decisions?
- What models or planning frameworks can guide the choosing of strategies at different levels?
- How do we design ML interventions to create synergy across levels; attend to context; evolve over time?

Slide 19: Questions

- How do we develop designs and analytic techniques that take into account the complexity of the phenomena we study?
- What is the potential for systems modeling for studying the effects of combinations of factors across levels?
- How do we disseminate to encourage
 - Thoughtful adaptation/ re-invention?
 - Continuing evolution and learning?
- How can collaborations be formed to study multilevel interventions from a broad perspective?

Slide 20: “Talk amongst yourselves”

[End presentation]