

Title Page: In Search of Synergy: Strategies for Combining Interventions at Multiple Levels

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Slide 2: Problem/Approach

- How can we combine interventions at different levels to produce complementary/synergistic effects?
- We used a causal modeling framework
- Focused on two types of interdependence
- Identified 5 strategies
- Illustrated with interventions at multiple levels to improve the quality of treatment for locally-advanced rectal cancer

Slide 3: Accumulation Strategy

[image]

Legend:

Box: intervention and level of influence (in parentheses)

Diamond: mediator

Oval: outcome

*For expositional purposes, the diagram depicts interventions rather than determinants as causes. Public reporting in this instance refers to the publication of practice-level CRT rates. To keep the presentation simple, a single mediating pathway is presented. (this applies to slides 3 through 7)

Flow process: 'Public Reporting*' (organizational)', 'Opinion Leader (interpersonal)' and 'Outreach visit (intrapersonal)' are Intervention boxes. These go into 'Physical motivation' which is the mediator for the three. 'Chemoradiation therapy' is the outcome from 'Physical motivation'.

[End image]

Slide 4: Amplification Strategy

[image]

Flow Process: 'Public reporting* (organizational)' and 'Opinion leader (interpersonal)' are joined together on the output and 'Reimbursement (intrapersonal)' is inputted into the result of the output from 'Public reporting* (organizational)' and 'Opinion leader (interpersonal)'. (All three are Intervention boxes)

The resulting output goes into 'Physical Motivation' which is the mediator for the three. 'Chemoradiation therapy' is the outcome from 'Physical motivation'.

[End image]

Slide 5: Facilitation Strategy

[image]

Flow process: 'Public Reporting* (organizational)' and 'Opinion Leader (interpersonal)' are Intervention boxes. The resulting output goes into 'Physical Motivation' which is the mediator for the two. 'Clinical Reminder (intrapersonal)' is an Intervention box inputs into the output of 'Physical motivation' into 'Chemoradiation therapy' result.

[End image]

Slide 6: Cascade Strategy

[image]

Flow process: This is a straightforward flow process from top down.

- Advocacy (policy) [Intervention] to
- Physician/Manager motivation [Mediator] to
- Tumor Board (organizational) [Intervention] to
- Multi-Disciplinary Planning [Mediator] to
- Opinion leader (interpersonal) [Intervention] to
- Physician Motivation [Mediator] to
- Chemoradiation therapy [Result]

[End image]

Slide 7: Convergence Strategy

[image]

This process has two tracks going to the same results.

Flow process:

Track One: 'Public Reporting* (organizational)' and 'Opinion Leader (interpersonal)' are Intervention boxes. The resulting output goes into 'Physical Motivation" which is the mediator for the two.

Track Two: 'Patient Education (intrapersonal) is an Intervention box that goes into a separate 'Patient motivation' mediator box.

The two mediator boxes (two tracks) go into 'Physician-Patient Interaction' mediator box. The result of this box goes in 'Chemoradiation therapy' result.

[end image]

Slide 8: Discussion Questions

- Do we have theories that explain how determinants at multiple levels interact to produce health and other outcomes?
- Do we have enough cross-level research that examines the interdependence of variables (determinants) at multiple levels of influence?
- Do we have sufficient grasp of the causal mechanisms through which commonly employed interventions produce their effects?

[End Presentation]