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

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Slide 2: Problem/Approach

- The cancer care continuum represents several types of care, each with multiple technical steps and interfaces requiring communication
- We use two case scenarios to illustrate the variability, diversity, and interaction of factors from multiple levels that impact quality of care
- Using hypothetical examples, we illustrate intervention strategies at different levels
 which are hypothesized to produce complementary/ synergistic effects to improve
 outcomes

Slide 3: Case #1: Screening in the Elderly

- Ms. Smith, 66 years, widow, worked for 40 years in assembly line
- She is using her free time to pursue an active social life and visiting her daughters
- Did not often see physicians because of limited insurance; she is generally healthy
- She has not been screened for colorectal cancer or breast cancer, and has not been screened for cervical cancer in 25 years

Slide 4: Screening Case Levels

- State Health Policy
 - o Special programs
- Organization
 - Outreach education

- o Outreach reminder system
- Provider Team
 - Physician incentives
- Individual
 - Health and functional status
 - o Knowledge/attitudes

Slide 5: Case #2: Cancer Treatment and Transition to Survivorship

- Zoe, 42 years, dx with breast cancer on first screening mammogram 18 mo. ago, stage II with axillary node involvement; surgery, radiation, and chemo
- Numerous symptoms persist: fatigue, weight gain, pervasive anxiety
- Wants to return to work but having difficulty because of symptoms; senses her family feels she should "get on with her life"
- Not seen primary MD since dx

Slide 6: Treatment Case Levels

- State Health Policy
 - o Insurance mandates
- Organization
 - o Quality of electronic medical record
 - o Care plan standard
- Provider
 - o Provider team functioning
 - Use of medical record
- Family/Social Support
 - o Family understanding/communication
 - o Knowledge/attitudes

Slide 7: Potential Intervention Strategies – Screening – Case 1

[Flowchart]

There are two inputs to the flowchart.

The first one is a box standing for 'Intervention (level of Influence)' called "Guideline education/detailing {Provider Team}" going into a diamond, which means mediator, containing "Provider Team --knowledge, skill, motivation".

The second input is a box standing for 'Intervention (level of Influence)' called "Patient education (e.g., mass media, lay educators) {Community}" going into a diamond, which means mediator, containing "Patient knowledge, beliefs, motivation"

Both inputs go into the "Provider Team --patient interaction" diamond {mediator}. There is another intervention influence between "Provider Team --knowledge, skill, motivation "(first input) and "Provider Team --patient interaction" diamonds. This influence is "IT health maintenance template [Organization]"

The result is "Patient-centered appropriate & timely screening". [End Flowchart]

Slide 8: Potential Intervention Strategies – Survivorship – Case 2

Accumulation intervention strategies are those interventions at multiple levels which produce a cumulative impact on a common mediating pathway.

A cascade strategy is one which affects the desired outcome in and through one or more interventions at other levels of influence.

[Flowchart]

There are 3 intervention inputs going into the "Hospital Team Readiness (mediator)" diamond. They are:

- Standard Tx Summary, Survivorship Plan (Policy)
- Designated Staff Assignment (Organization)
 - o MD, RN champion
 - Patient educator and navigator
- All Staff Orientation (Provider)

"Hospital Team readiness" goes into "Patient Education Post-Tx Session (patient) [intervention]". "Primary Care Partnership Orientation (Community) {intervention} also goes into "Patient Education Post-Tx Session (patient)".

"Patient Education Post-Tx Session (patient) {intervention}" goes into "Knowledgeable, empowered Self-efficacious Patient {mediator}. "On-Call Navigation by Patient Education (Patient) also goes into into "Knowledgeable, empowered Self-efficacious Patient {mediator}.

The result is 'Coordinated Survivorship Care".

[End Flowchart]

Slide 9: Discussion Questions

- Consider the process of identifying the potential multilevel determinants of care quality
 - o Do we have models to guide the prioritization of strategies at various levels to produce specified outcomes in need of improvement?
 - o What problems within each type of care should be research priorities?