Utilizing the Resident Wellness Scale to Assess Impact of Interventions on Resident, Program, and Institutional Levels

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TSVETI MARKOVA
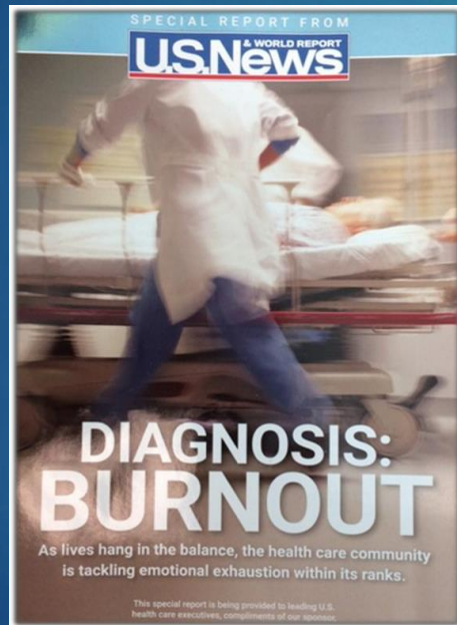
Outline

- The Resident Wellness Scale
  - History and development
  - Subscales and validity
- Describe 3-level model
- Breakout: List forces at multiple levels
- Multi-level model results
- Breakout: Develop intervention plans
- Discussion

The Importance of Wellness

"Burned out clinicians and staff provide burned-out clinician and staff care"

SPECIAL REPORT FROM
U.S.News & WORLD REPORT

DIAGNOSIS: BURNOUT

As lives hang in the balance, the health care community is tackling emotional exhaustion within its ranks.

This special report is being provided to leading U.S. health care executives, compliments of our sponsor.

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Residents with depression or depressive symptoms: 25.3% to 32.5%

Mata, Ramos, Bansal, Khan, Guille, Di Angelantonio, & Sen (2015).

"We must move beyond the pathological focus upon physician burnout and begin a conversation about what makes a physician well."

Eckelberry-Hunt, van Dyke, Lick, & Tucciarone (2009)

Systematic Approach to Wellness

- Acknowledge issue, involve stakeholders
- Assess:
  - Outline metric
  - Choose validated instrument
  - Compare with benchmarks
  - Review and analyze
- Intervene
  - Monitor regularly
  - Promote health (exercise, nutrition, mindfulness, fatigue mitigation)
  - Peer support (social events, common space)
  - Institutional culture (policies, mission, "just culture", efficient work flow)
  - Support services (mental health, EAP)
  - Professional development (time management, leadership, teamwork)

Wellness is a complex construct

What Differentiates Well from Unwell Residents?

Life Security: your basic needs are met
Meaningful Work: your work is valued
Personal Growth: you are in control
Ability: you can do a good job
Social Support: people help you
Institutional Support: your workplace supports you
Lack of Unwellness: you are free of negative behaviors

The Resident Wellness Scale

- Positively Worded
  - High score indicates high wellness
  - Behaviors and feelings of wellness
  - Derived from qualitative data
- Brief
  - 10 items
  - Online
  - Immediate feedback

Please rate how often you have done or experienced each of the following items in the past 3 weeks:

	Never	Seldom	Some-times	Often	Very Often
Reflected on how your work helps make the world a better place	○	○	○	○	○
Felt the vitality to do your work	○	○	○	○	○
Felt supported by your co-workers	○	○	○	○	○
Had an enjoyable interaction with a patient	○	○	○	○	○
Was proud of the work you did	○	○	○	○	○
Was eager to come back to work the next day	○	○	○	○	○
You felt your basic needs are met	○	○	○	○	○
You ate well	○	○	○	○	○
Knew who to call when something tragic happened at work	○	○	○	○	○
You felt connected to your work in a deep sense	○	○	○	○	○

Convergent Validity

- High Cronbach's alpha: $alpha$ **= .87**
- Correlated with Depression: *r* **= -.45**
- Correlated with Burnout:
  - Emotional Exhaustion: *r* **= -.59**
  - Depersonalization: *r* **= -.45**
- Correlated with Optimism: *r* **= .46**
- Correlated with Life Satisfaction: *r* **= .58**
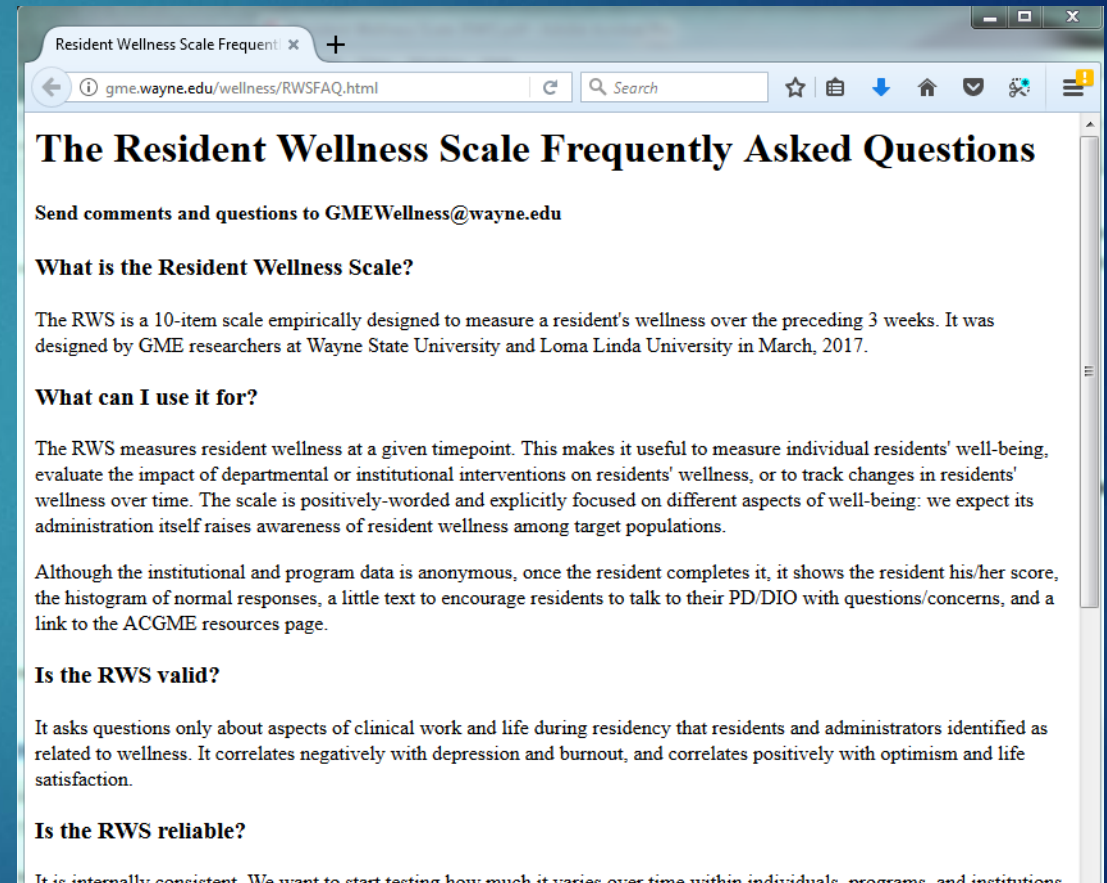- Weaker correlation with Social Desirability: *r* **= .29**

RWS is free to use

Data Sharing Agreement
- Between WSU and another institution
- IRB exemption, business-office approved

Institution added to RWS database
- Institution code
- Institution-specific URL for residents
- "Site" variable for group identification
- Custom feedback page
- Login/Password to retrieve data

Results: Multi-level Model

- 5 Institutions
- Each institution has 2 to 12 programs
- Each program has 1 to 23 responses
- Total N = 210

Orthogonal Components

High unidimensionality

Two Principal Components: eigenvalue > 1
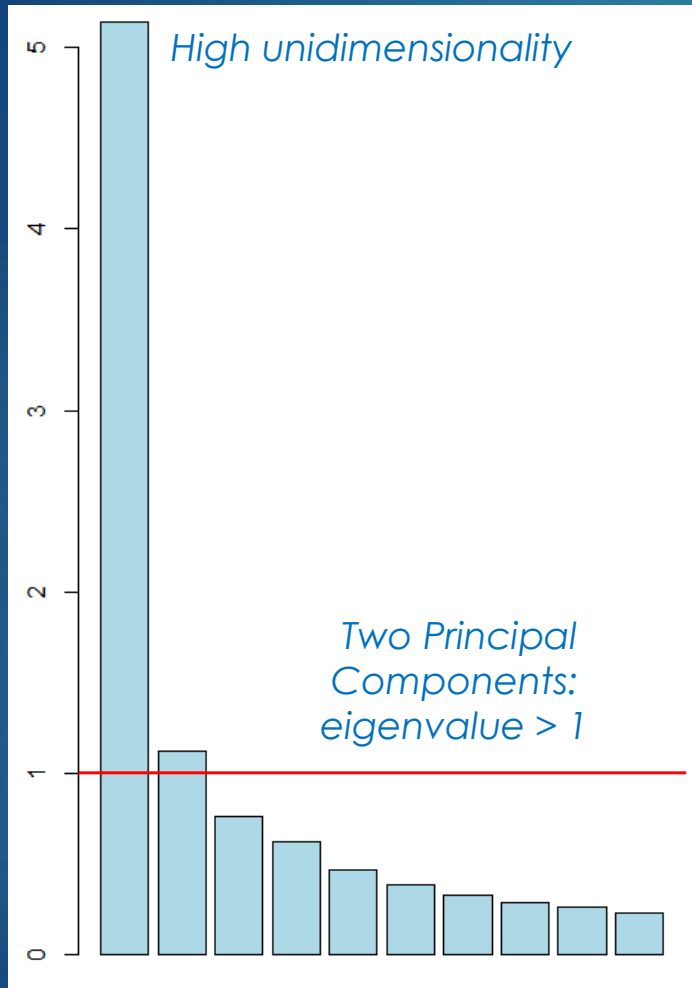
Varimax-rotate first 2 components:

Meaningful Work:
- Reflected on how your work helps make the world a better place
- Was eager to come back to work the next day
- You felt connected to your work in a deep sense

Self Care:
- You ate well
- You felt your basic needs are met

Gender effects

▶ Significant findings:
  ▶ Females feel less supported by co-workers *(t(203) = -2.2, p<.05)*
  ▶ Females are less eager to come back to work each day *(t(203) = -2.5, p<.05)*
  ▶ Females feel less like their basic needs are met *(t(203) = -2.2, p<.05)*

▶ Trends:
  ▶ Females feel less proud of their work *(t(203) = -1.8, p<.10)*
  ▶ Females less likely to have eaten well *(t(203) = -1.8, p<.01)*

Post Graduate Year effects

Meaningful Work
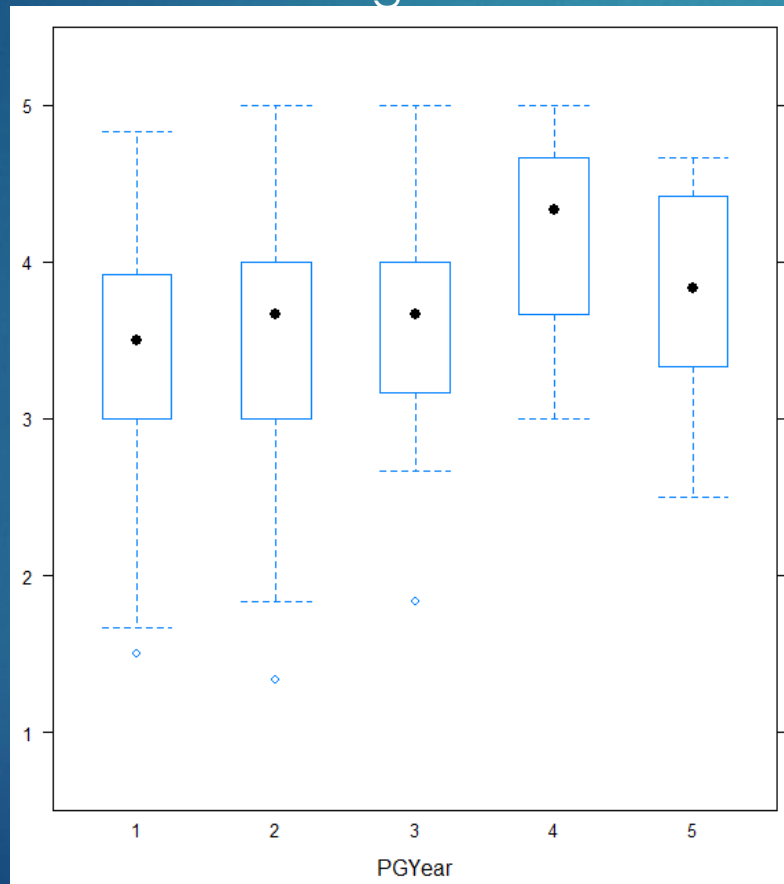
Self Care
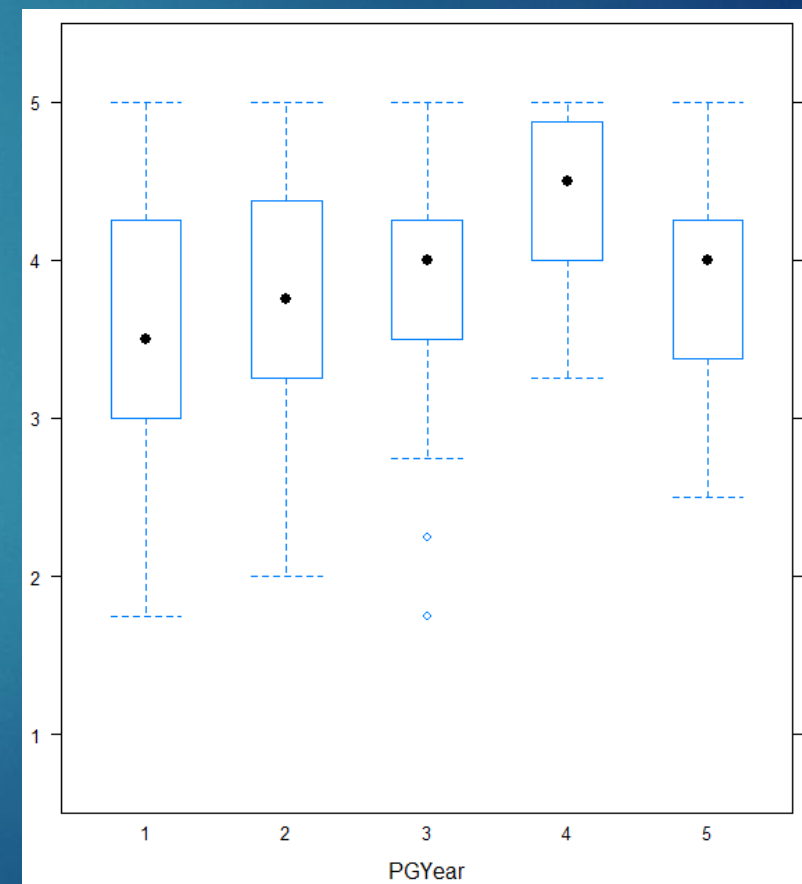
Interventions
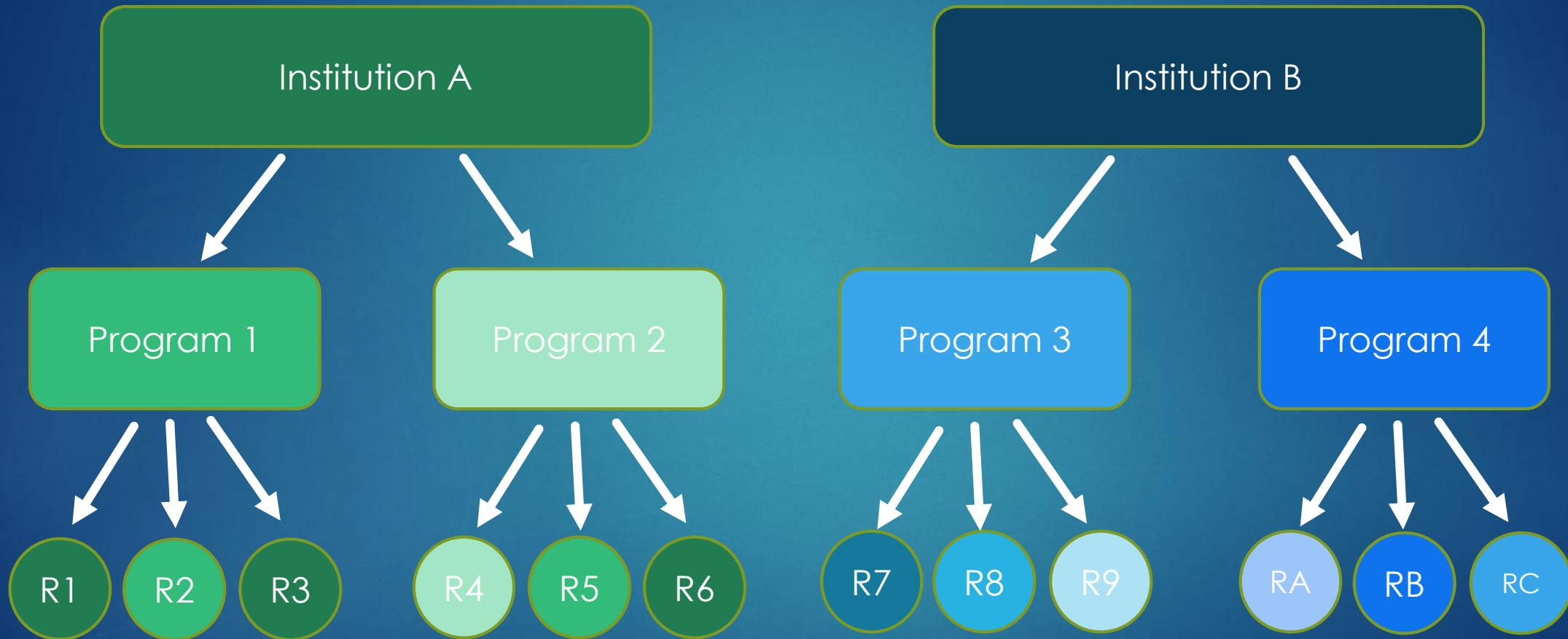
▶ Ulliance Employee Assistance Program

▶ Wellness Warriors

▶ Wellness round-table at Annual Institutional Review

▶ ICU Hours

▶ Fitbit Challenge

▶ Daily Puzzles

▶ Wellness Initiative Survey

▶ Morning Coffee Sessions *starting soon*

▶ Yoga *starting soon*

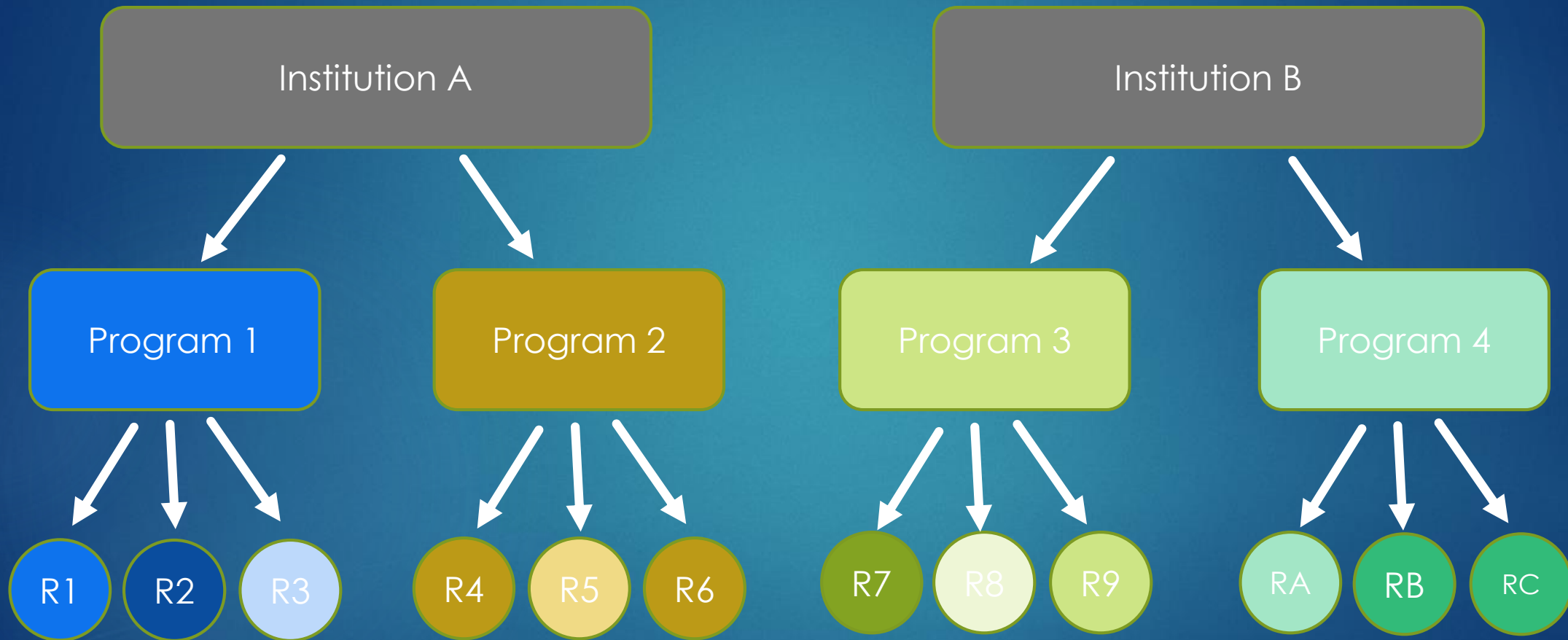*resident-led*
resident-led
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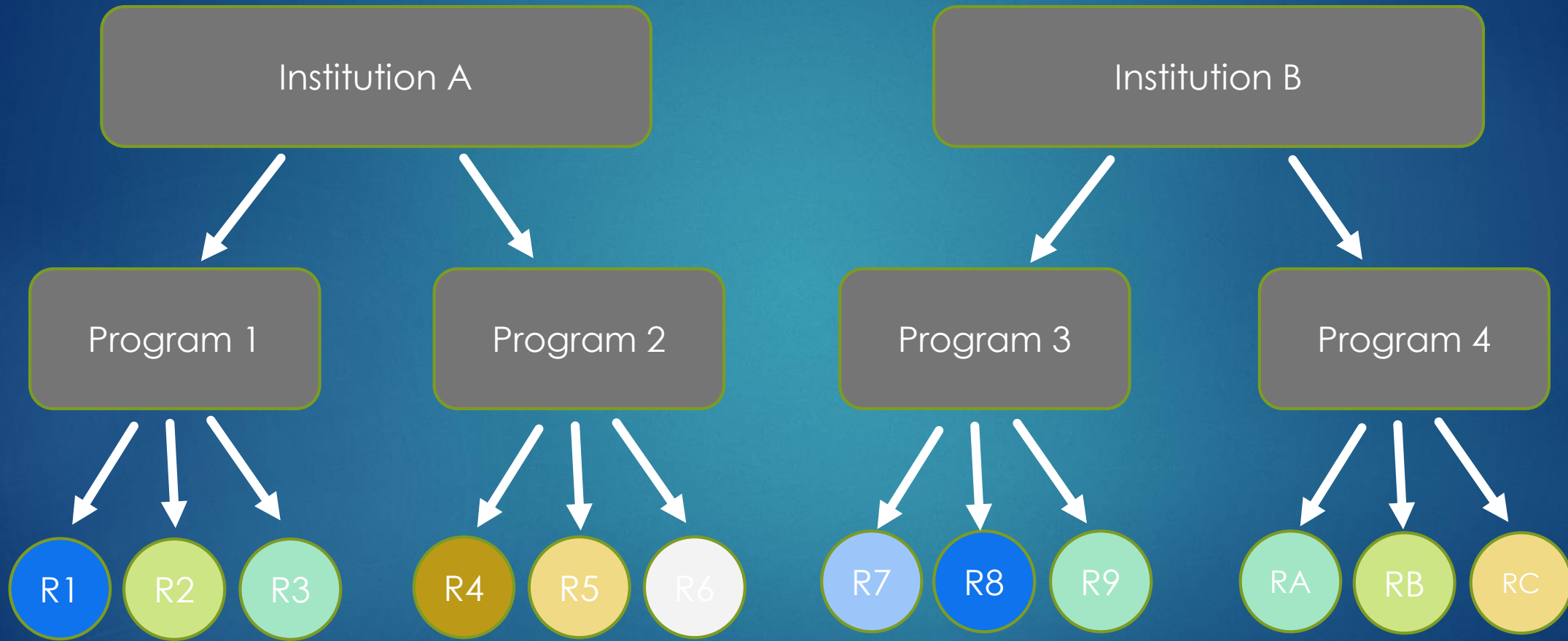*resident-led*

3-Level Model: Institution Forces

3-Level Model: Program Forces

3-Level Model: Resident Forces

Breakout: List Multilevel Forces

Results: Multi-level Model

- 5 Institutions
- Each institution has 2 to 12 programs
- Each program has 1 to 23 responses
- Total N = 210
- Mixed Model with REML controls for sample size bias
  - Errs on the side of the global mean when N is low
  - Estimates variance components for each level

Resident Wellness: Meaningful Work

Institutions: A, B, C, E, F
Programs within Institution
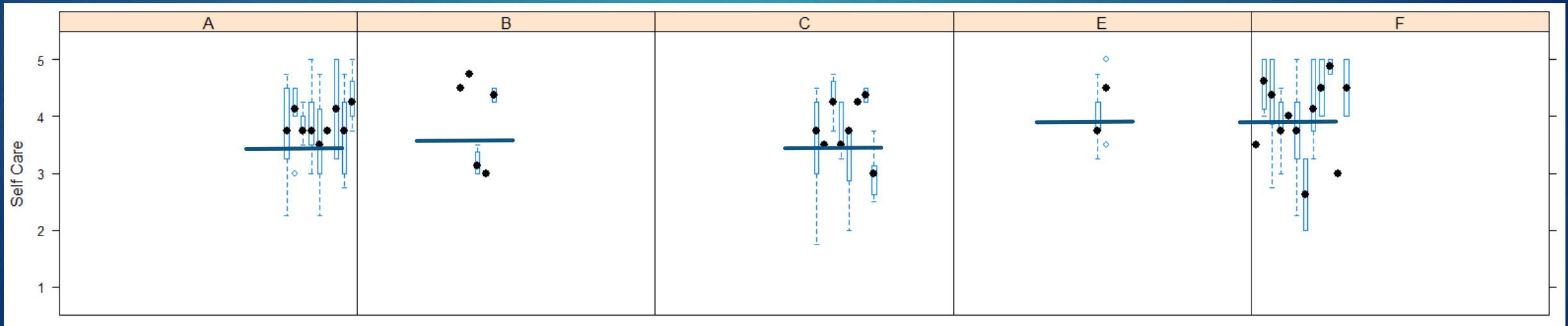Residents within Programs
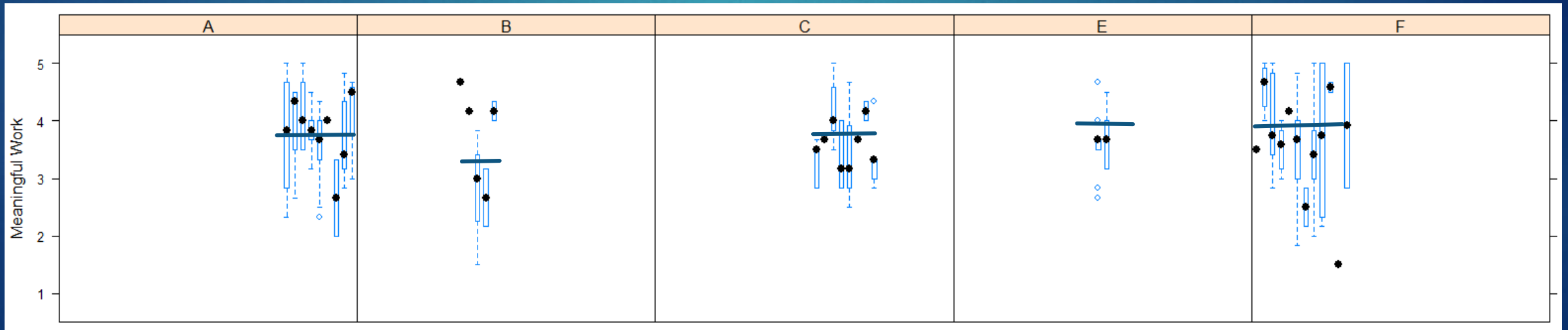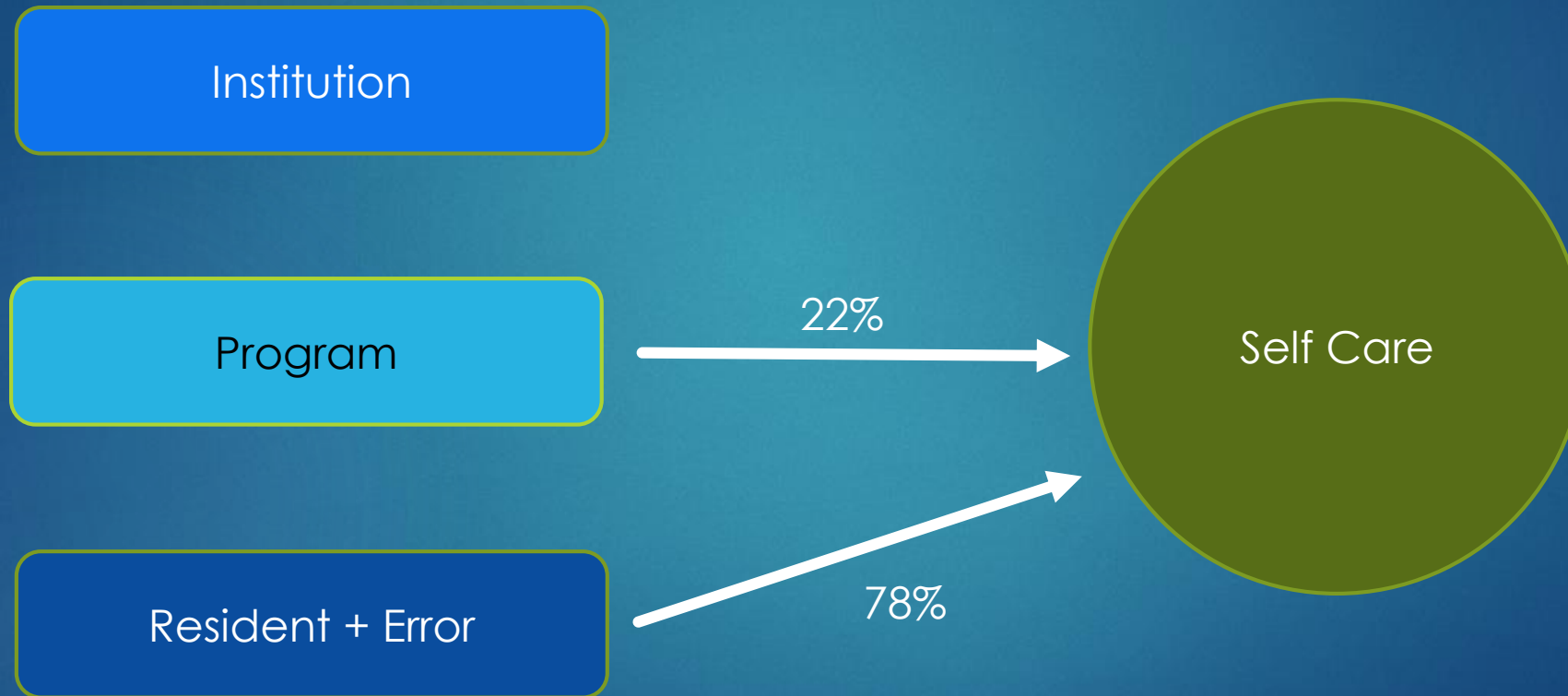
Resident Wellness: Meaningful Work
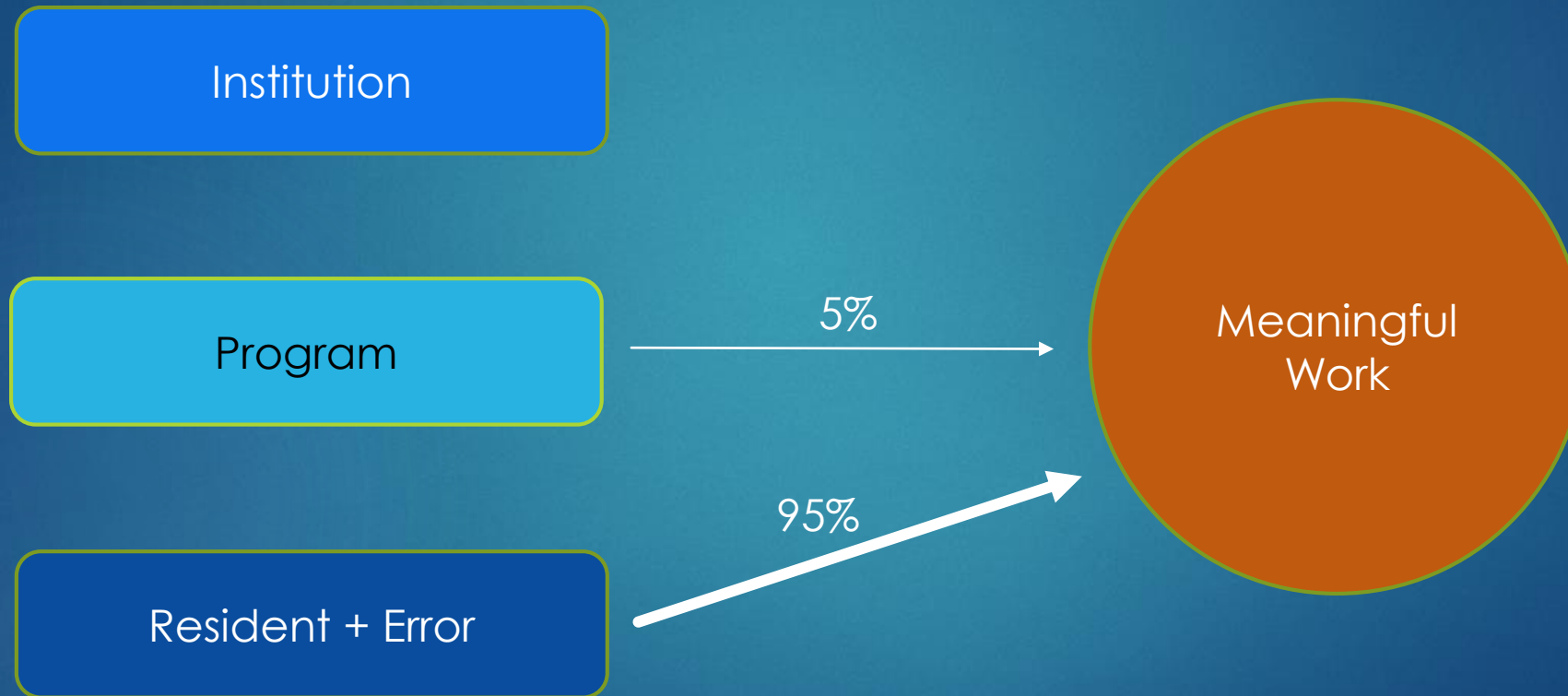
Resident Wellness: Self Care

Institutions: A, B, C, E, F
Programs within Institution
Residents within Programs

Resident Wellness: Self Care

Item-level Institution vs. Program

Institution more impactful

Equally impactful

Knew who to call when something happened at work
Reflected on how your work helps make the world a better place

Felt the vitality to do your work

Had an enjoyable interaction with a patient
Was eager to come back to work the next day
You ate well
Was proud of the work you did
You felt connected to your work in a deep sense
Felt supported by your coworkers

Program more impactful

You felt your basic needs are met

Breakout:
Design
Interventions

Questions