



ORGANIZATIONAL RESEARCH IN HEALTHCARE WORKSHOP



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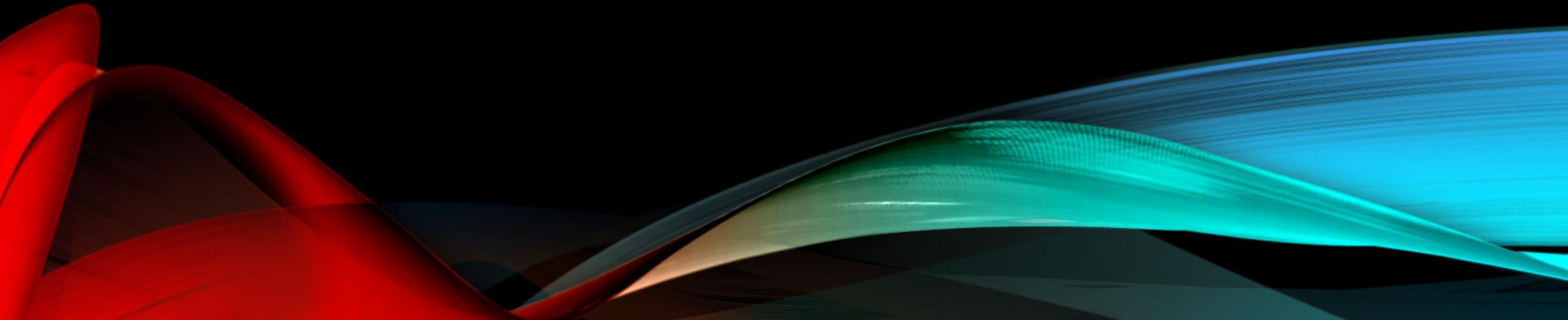
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ROBERT CROYLE, PH.D.

Welcome





After the Socioecological Model – the “Onion”





WORKSHOP OBJECTIVES

1. Explore the current state of the science of healthcare organizations
2. Review measures of organizational structure, behavior, interventions, and implementation strategies from a multilevel perspective
3. Discuss common problems in organizational science, measures, conducting, and evaluating multilevel health care delivery interventions

AGENDA - MORNING

9:00am	Welcome and Opening Remarks	Robert Croyle, Ph.D. <i>National Cancer Institute</i>
9:20 am	Introduction: Landscape of healthcare systems in the US	Jose Escarce, M.D., Ph.D. <i>UCLA and The Rand Corporation</i>
9:30 am	Lecture 1: Overview and evolution of organizational theory in healthcare. What has been learned over the past 20 years?	Sylvia Hysong, Ph.D. <i>Veterans Administration</i>
10:05 am	Lecture 2: Implementation of organizational interventions	Greg Aarons, Ph.D. <i>University of California San Diego</i>
10:45 am	Lecture 3: Measuring Organizational Factors	Jose Escarce, M.D., Ph.D. <i>UCLA and The Rand Corporation</i>
11:05 am	Lecture 4: Challenges in evaluating organizational interventions	Brian Mittman, Ph.D. <i>Kaiser Permanente</i>

AGENDA - AFTERNOON

12:30 pm	PANEL 1: <i>Topic 1:</i> Practical examples of connecting organizational research to healthcare delivery	Sallie Weaver, Ph.D. <i>National Cancer Institute</i>
12:55 pm	Topic 2: PROSPR-2 experience of developing organizational measures	Elisabeth Beaber, Ph.D. <i>Fred Hutchinson Cancer Research Center</i> Jasmin Tiro, Ph.D. <i>University of Texas Southwestern</i>
1:05 pm	Topic 3: Care coordination and tension between primary care and specialty groups	Jennifer Haas, M.D. <i>Harvard Medical School</i>
1:15 pm	Topic 4: Practical application of interventions designed to influence organizational leadership	Jill Marsteller, Ph.D. <i>Johns Hopkins University</i>
1:40 pm	<i>Concurrent Small Breakout Groups with Experts</i>	<i>All participants</i>
3:30 pm	PANEL 2: Topic: Report out from breakout groups	<i>Notetaker from breakout group</i>
4:00 pm	PANEL 3: Topic: Expert reflections of the day	<i>Key speakers</i>
4:30 pm	Wrap-up Question: What can NCI do in the future to support organizational science in healthcare?	Erica S Breslau, Ph.D and Paul Doria-Rose, Ph.D

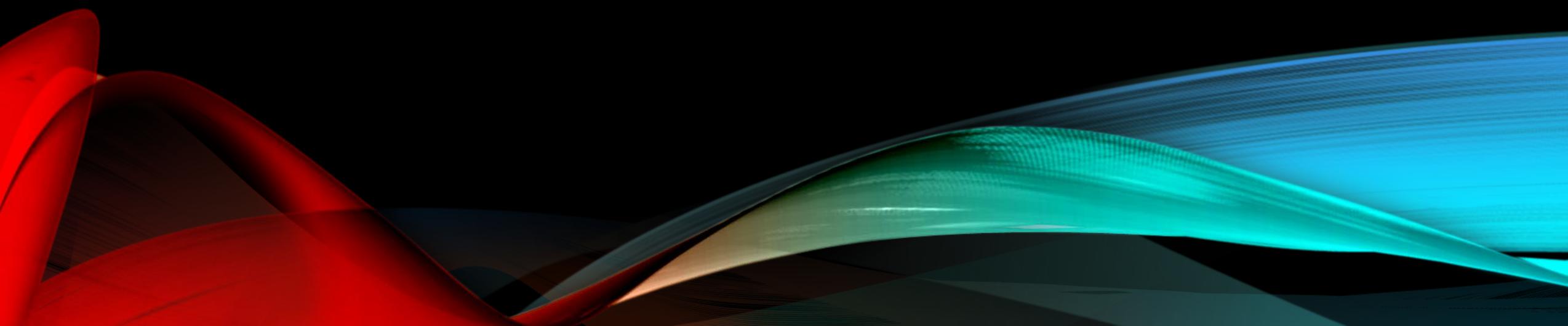
WRITE DOWN YOUR THOUGHTS!

For those who have thoughts throughout the meeting or those who do not have their questions answered. We encourage you to use:

- Easel
 - Post-it Notes
 - Pens
-
- Questions from Webinar Listeners: Jennifer.Schaefer@icfnext.com

JOSE ESCARCE, M.D., PH.D.

Landscape of healthcare systems in the US

The bottom of the slide features an abstract graphic consisting of several overlapping, flowing, ribbon-like shapes. On the left side, there are vibrant red shapes that curve and flow towards the right. On the right side, there are bright cyan and blue shapes that also flow and curve, creating a sense of movement and depth. The background is a solid dark color, which makes the glowing, semi-transparent shapes stand out prominently.

Landscape of Health Systems in the United States

José J. Escarce, M.D., Ph.D.

University of California at Los Angeles

RAND Center of Excellence on Comparative Health System Performance

Organizations in Healthcare Workshop

National Cancer Institute

October 15, 2019

Outline of Talk

- Definition of health systems
- Importance of health systems
- Landscape of health systems in the United States
- Summary

Definition of Health System

- A health system is an organization that includes at least one hospital and at least one group of physicians, that provides comprehensive care, and whose components are connected through common ownership or joint management
 - Requires vertical integration of hospitals and physicians
 - Excludes horizontally integrated entities (e.g., hospital systems)
 - Excludes vertically integrated entities that lack either a hospital or a physician group (e.g., systems of hospitals and nursing homes)

A Lightning History

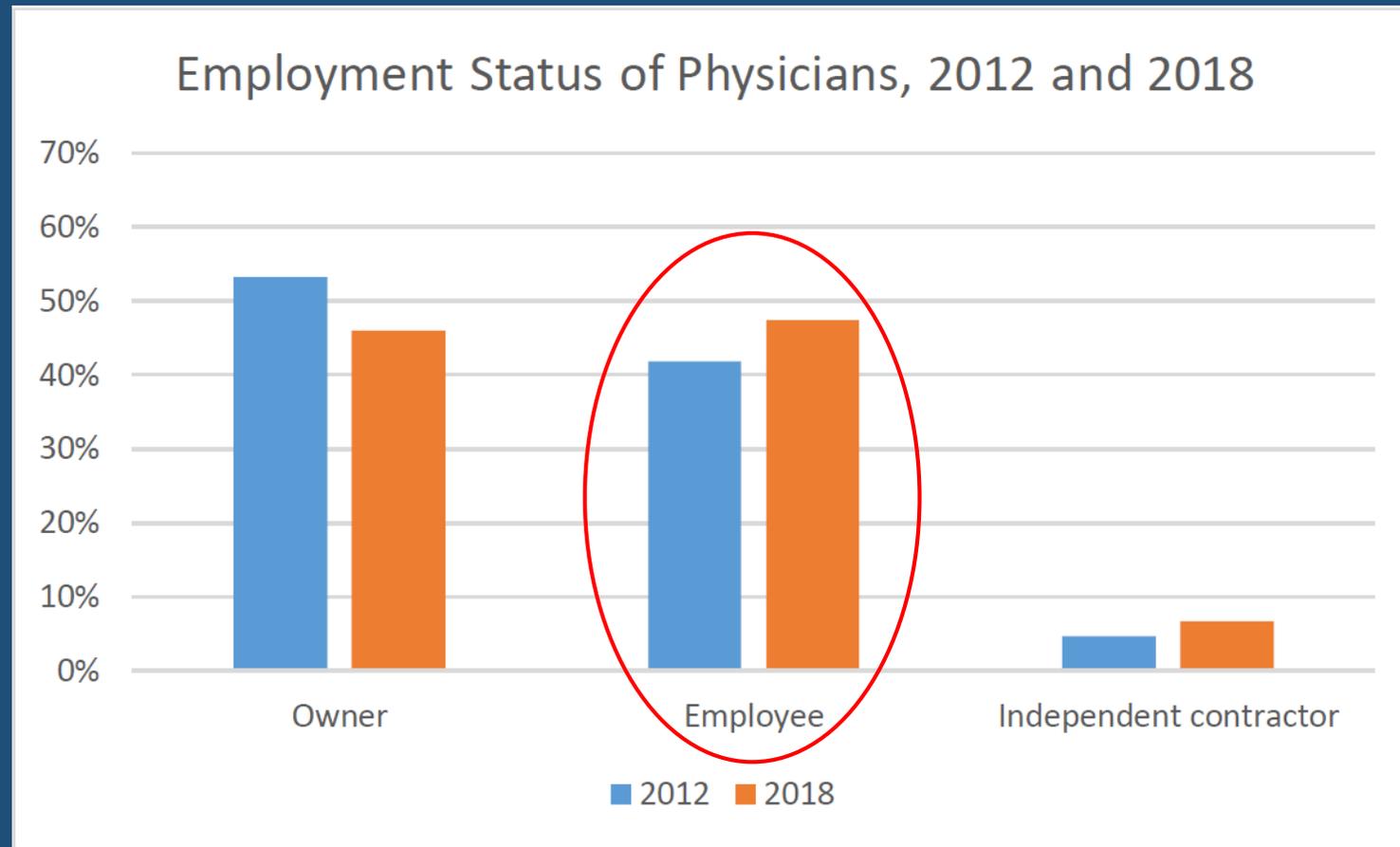
- Horizontal integration in health care began in the 1980s
 - Hospital systems, multispecialty groups, independent practice associations
- Vertical integration began and grew in the 1990s
- Both types of integration are a response to the introduction and growth of price competition and selective contracting in health care
 - Integration represents a way for providers to gain market power in bargaining with insurers

Importance of Health Systems

- The importance of health systems is two-fold:
 - Growth of vertically integrated health systems affects how an increasing number of providers practice and how patients receive health care
 - Growth in the market penetration of vertically integrated systems may affect the cost and quality of health care that patients receive

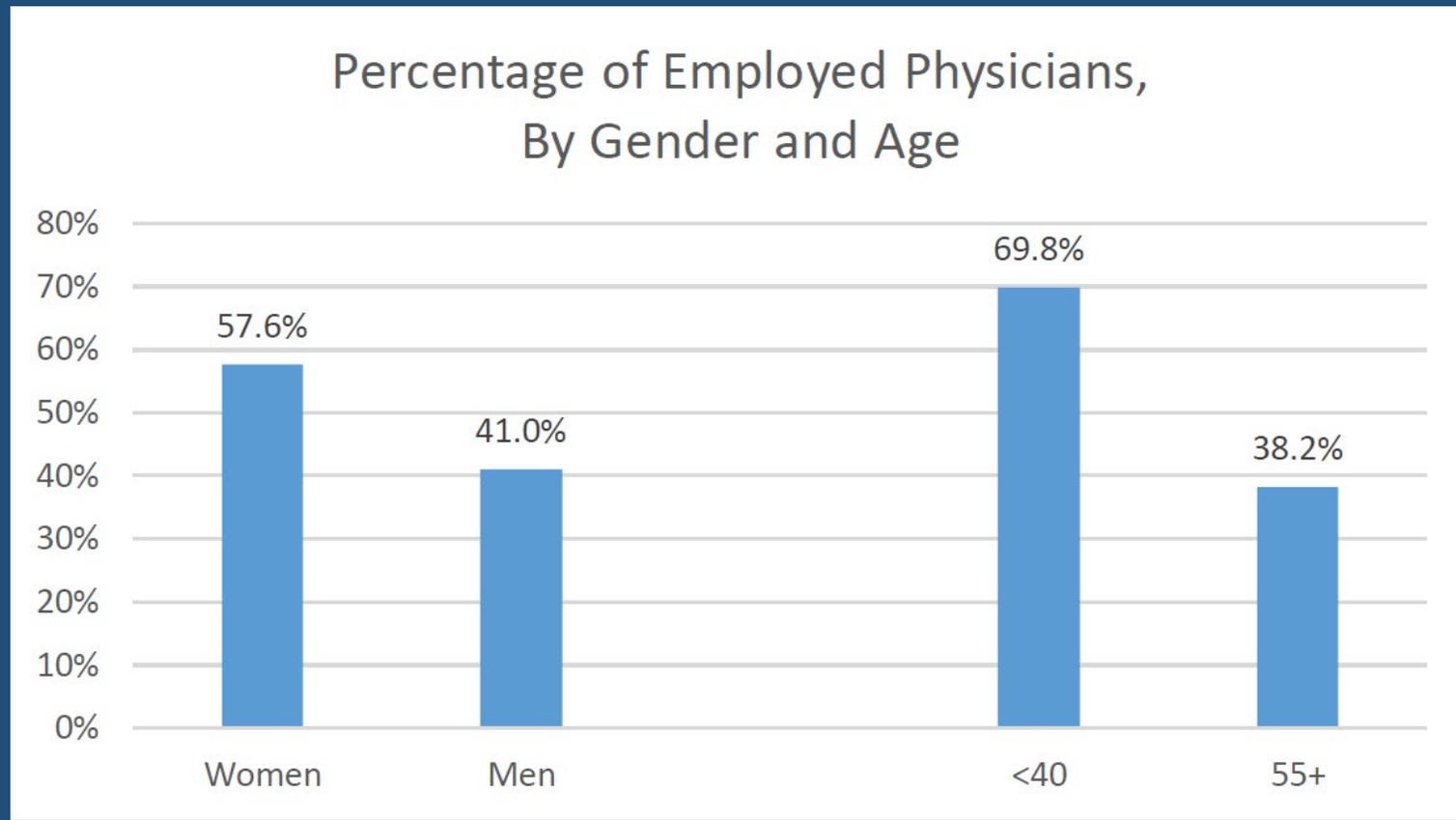
Growth In Health Systems

- Trends in physician practice:



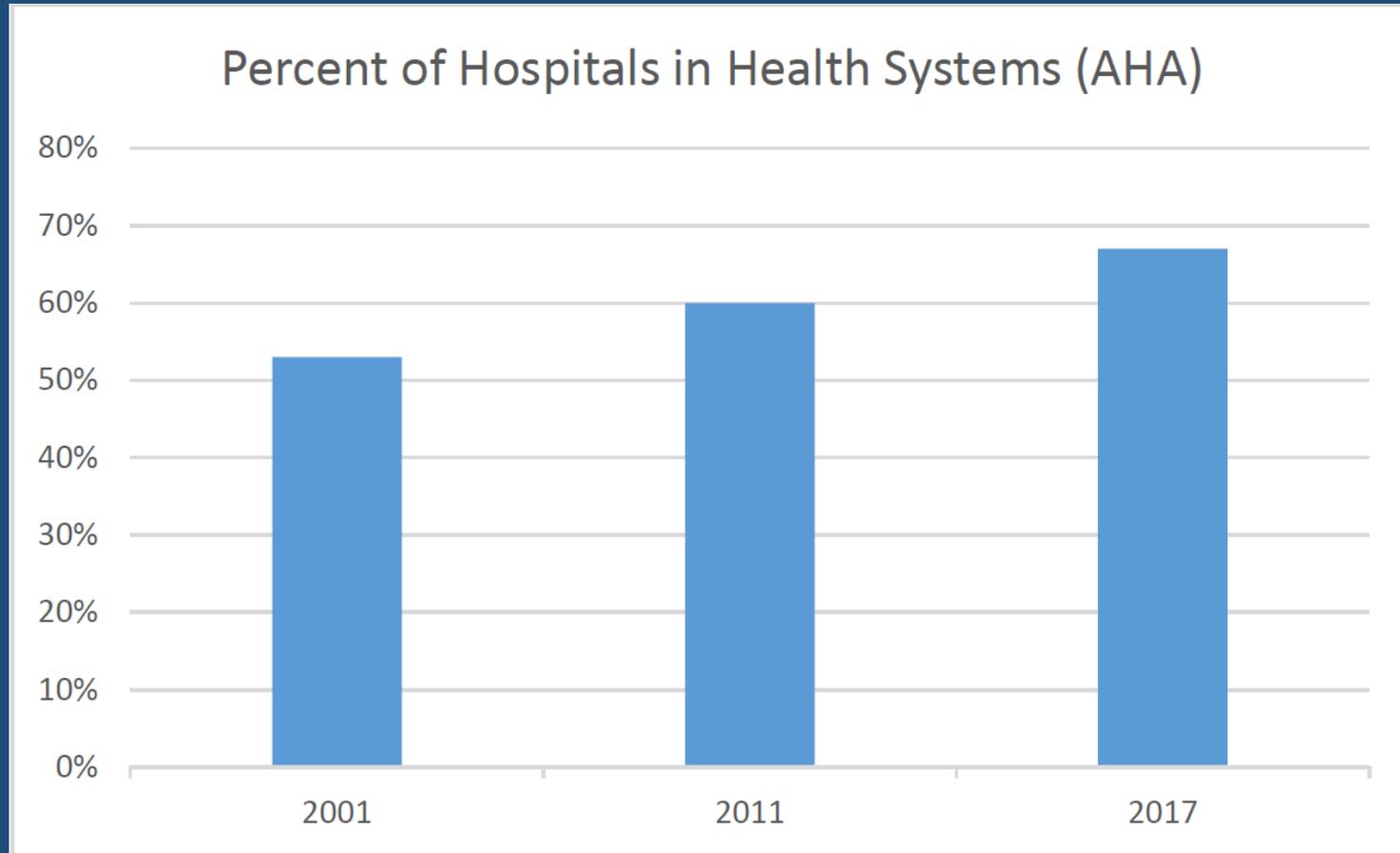
Growth In Health Systems

- Trends in physician practice:



Growth In Health Systems

- The impact on hospitals:



Growth In Health Systems

Potential effects on cost and quality:

- The Good:
 - Access to capital to pursue quality improvement and infrastructure investments (e.g., HIT, research departments)
 - Better communication and greater care coordination may reduce unnecessary and redundant care
 - Centralized leadership may facilitate a culture of continuous quality improvement
 - Easier adoption of care management systems and guidelines
 - Alignment of incentives may facilitate standardizing care

Growth In Health Systems

Potential effects on cost and quality:

- The Bad:
 - Market power may result in higher prices
 - Market power may reduce quality competition
 - Depending on how care is paid for, incentives to hospitalize patients to benefit system hospitals
 - Depending on how care is paid for, incentives to increase utilization
- The effects of health systems on cost and quality remain an empirical question

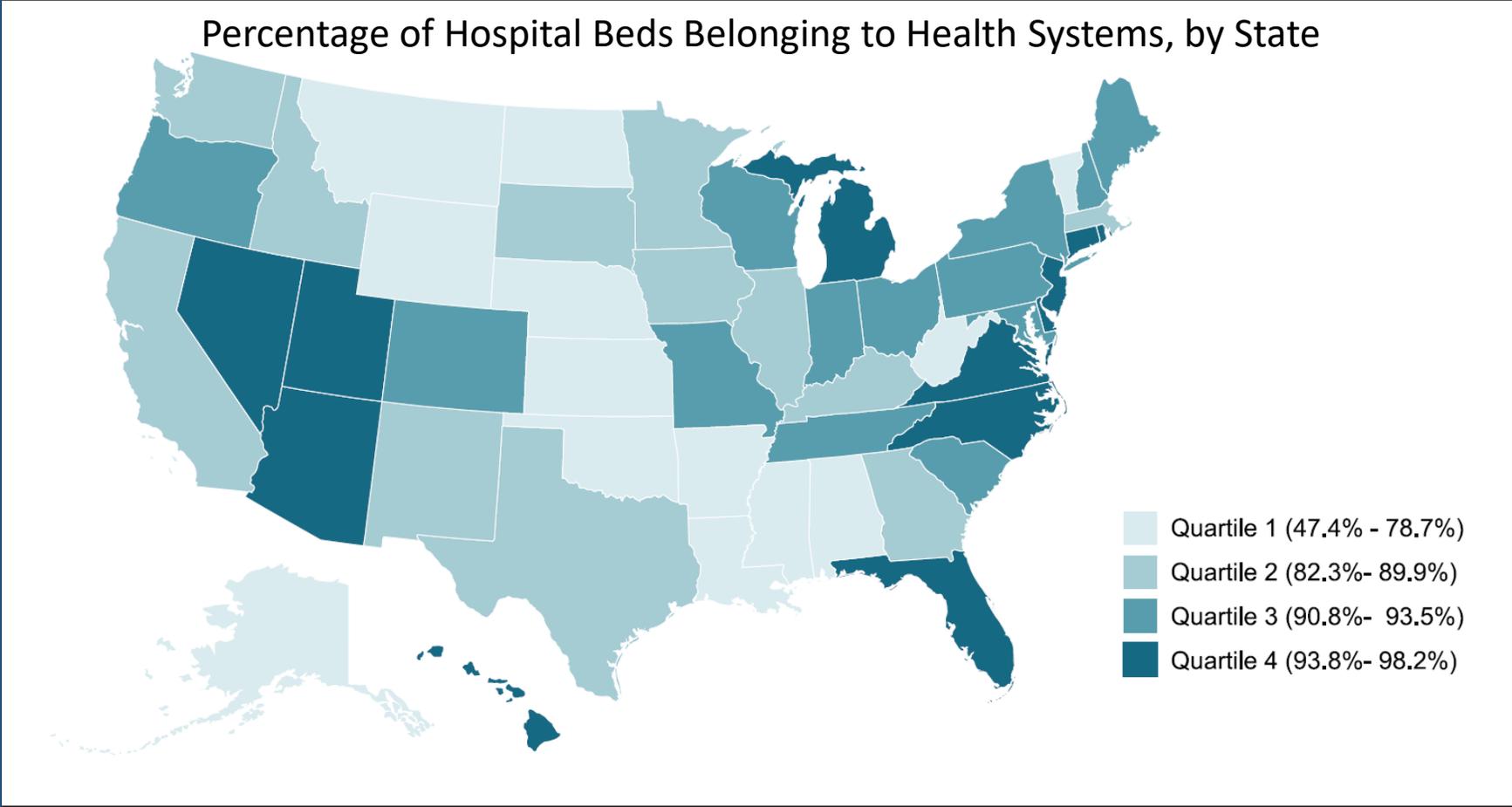
Landscape of Health Systems Circa 2016: The AHRQ Compendium

Mean System Size and Percentage of Hospitals, Beds, and Physicians in 626 Health Systems With ≥ 50 Physicians

	Mean per system	Total no. in systems	Percentage in systems
Hospitals	6	3,513	69.7%
Hospital beds	965	601,352	88.2%
Physicians	742	464,505	44.6%
PCPs	227	142,000	42.7%

Source: Furukawa et al. (2019).

Landscape of Health Systems Circa 2016: The AHRQ Compendium



Source: Furukawa et al. (2019)

Landscape of Health Systems Circa 2015: The RAND Center of Excellence

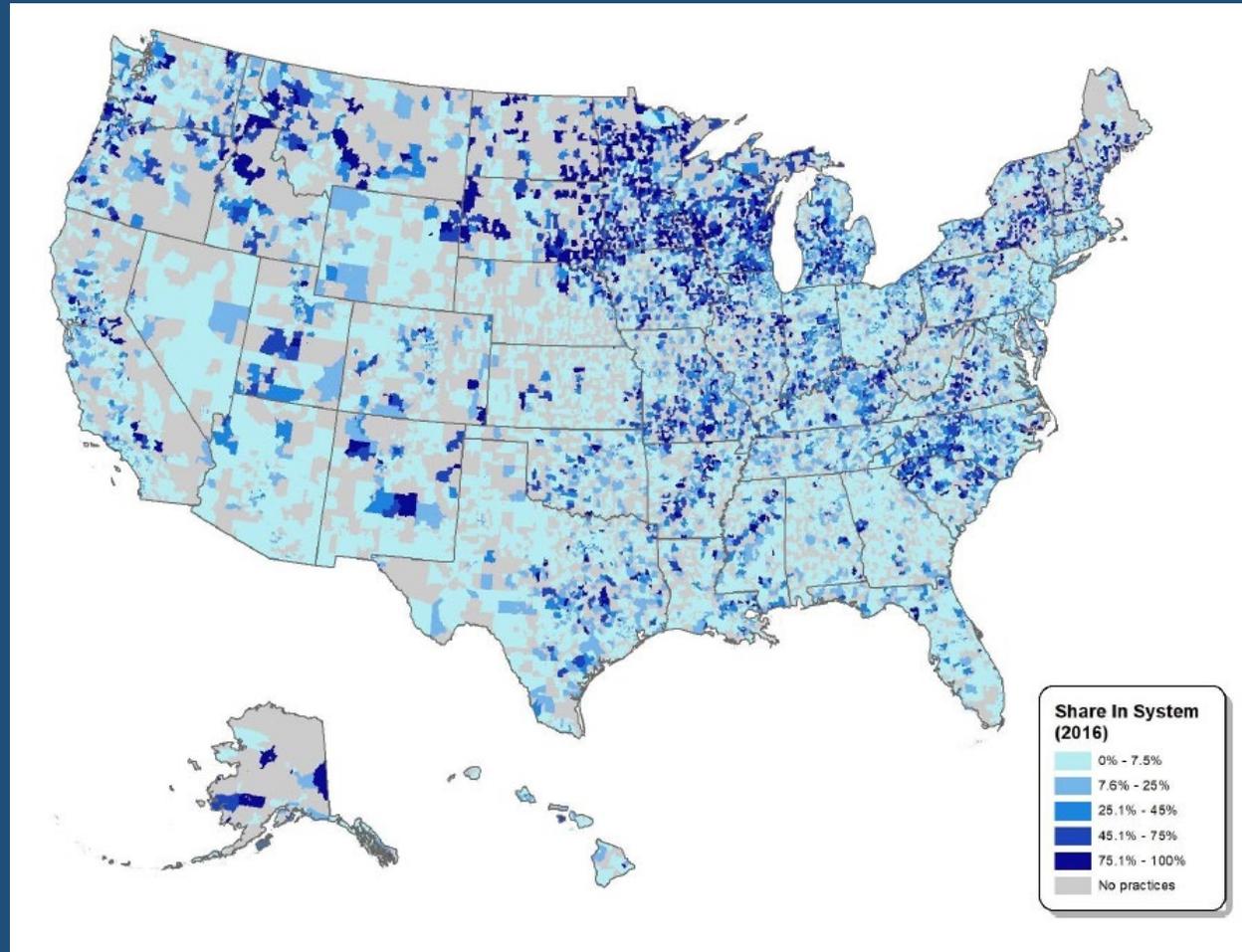
Mean System Size and Percentage of Physicians in 477 Health Systems With ≥ 50 Physicians

	Mean per system	Total no. in systems	Percentage in systems
All physicians	498	237,629	42.6%
PCPs	160	76,262	37.9%
Non-PCPs	338	161,367	45.3%

Source: RAND COE analysis of Medicare data.

Landscape of Health Systems Circa 2015: The RAND Center of Excellence

Percentage of Traditional Medicare Beneficiaries in Health Systems, by Hospital Service Area



Summary

- Vertically integrated health systems have grown over the past 25 years and currently nearly one-half of physicians and two-thirds of hospitals take part
 - There is substantial geographic variation in the market penetration of vertically integrated systems
- Health systems have contributed to changing the nature of medical practice
- The effects of vertical integration on the costs and quality of care is an empirical question about which much remains to be learned

SYLVIA HYSONG, PH.D.

Overview of organizational theory in healthcare





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Organizational Theory in Cancer Care

Organizations in Healthcare Workshop
National Cancer Institute
October 15, 2019

Sylvia J. Hysong, Ph.D.



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Overview / Agenda

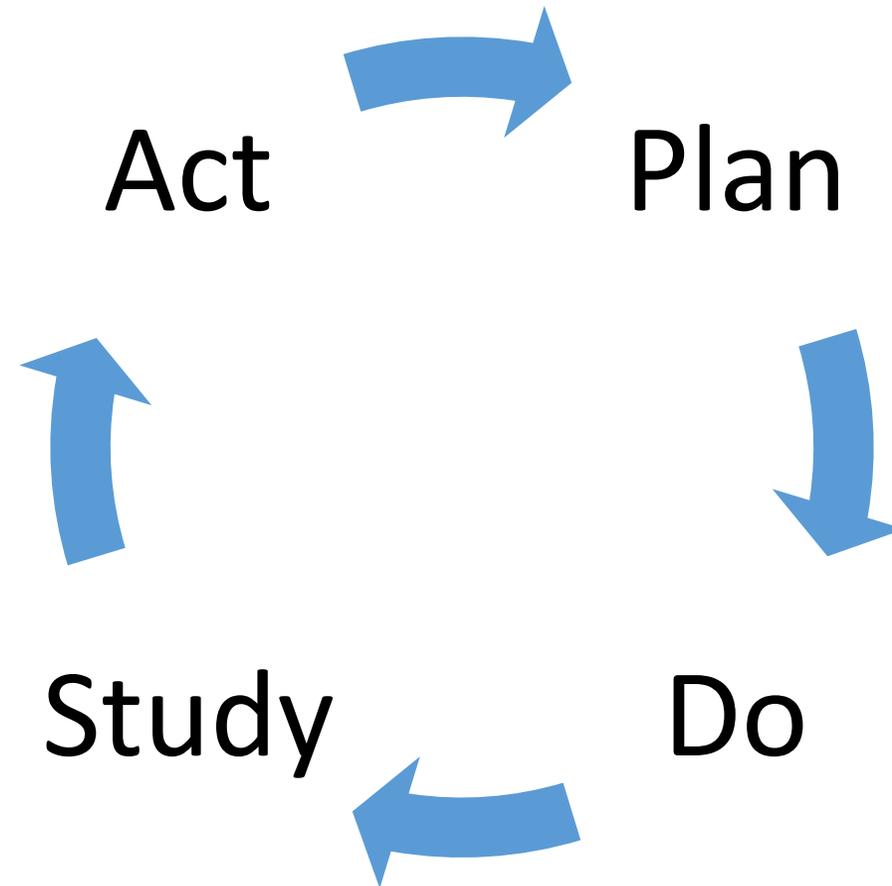
- Why organizational theory is important to healthcare research
- Organizational theory in healthcare: the last 20 years
- A few key theories of interest
- From theory to reality: a case example
- Closing thoughts

Outcomes important to cancer care

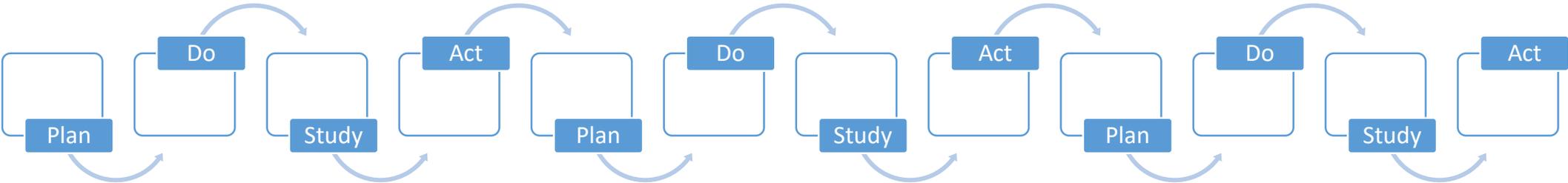
Outcome	Level of Analysis		
	<i>Micro</i>	<i>Meso</i>	<i>Macro</i>
Efficacy		✓	
Effectiveness – Quality of Life	✓	✓	✓
Effectiveness – Patient Satisfaction	✓	✓	✓
Patterns of Quality of Care		✓	
Cancer Impact		✓	
Economic Burden			✓

Source: Lipscomb et al. 2004

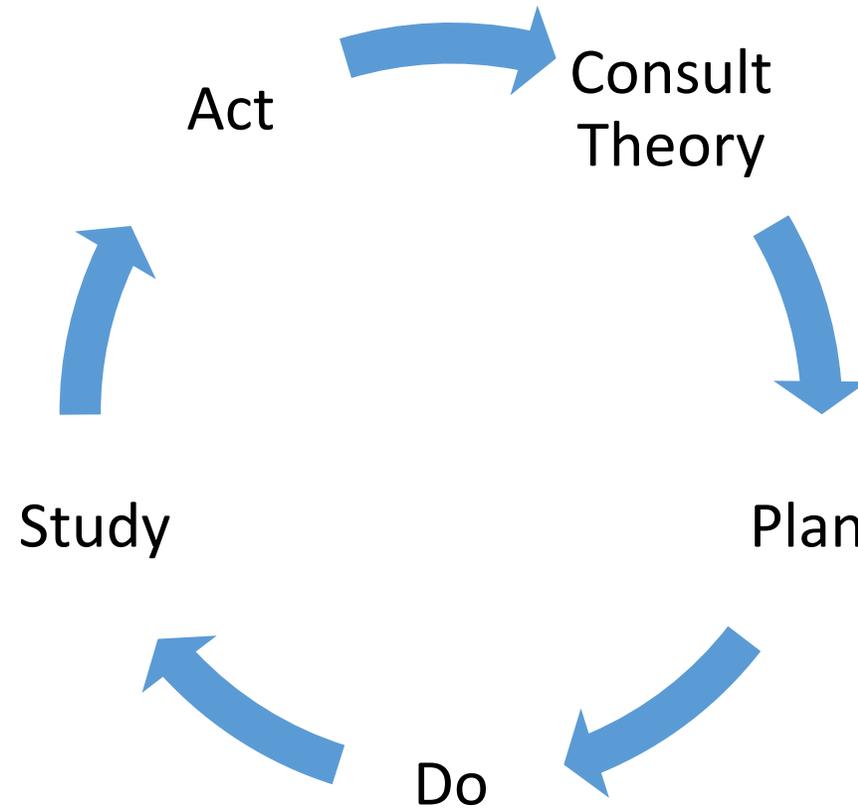
A Classic Approach to Quality Improvement: The PDSA Cycle



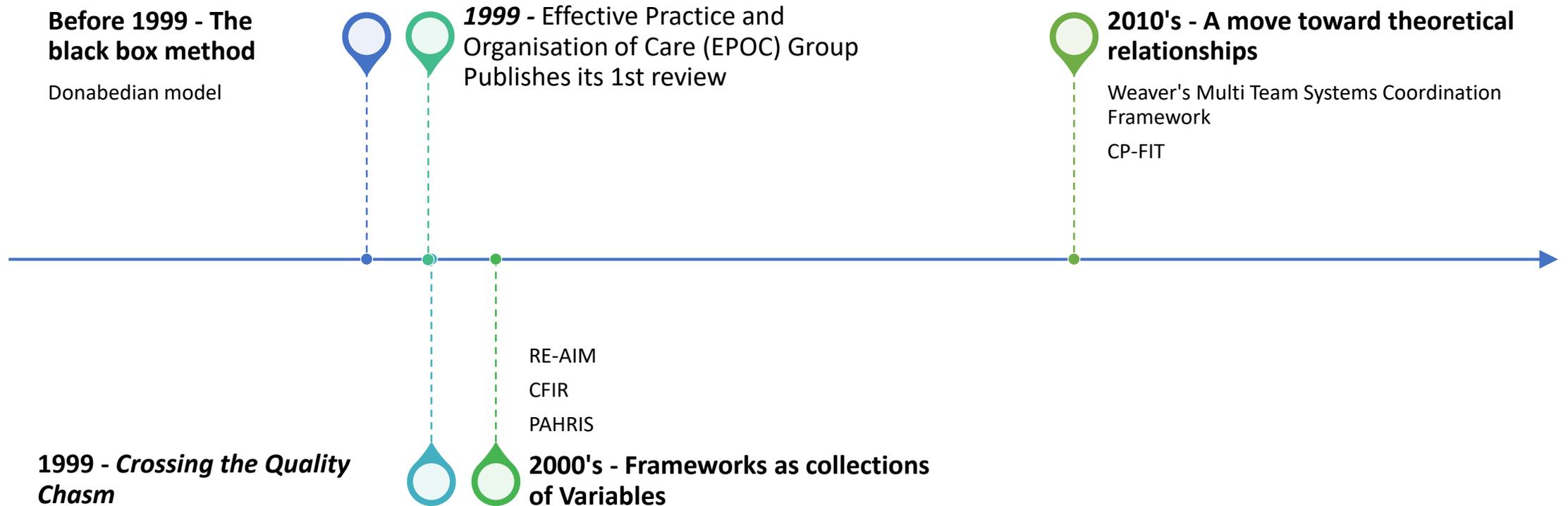
The reality of PDSA Cycles...



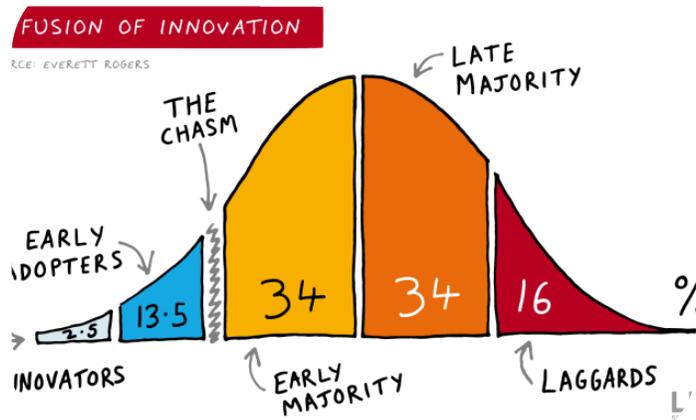
A little theory can save a lot of time!



The last 20 years of Organizational Theory in Healthcare

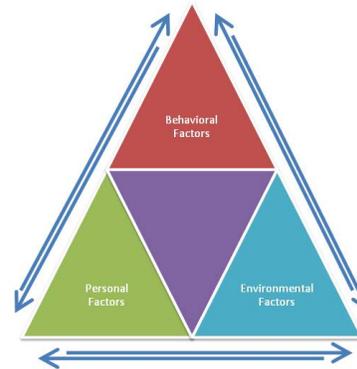


A few organizational theories of interest

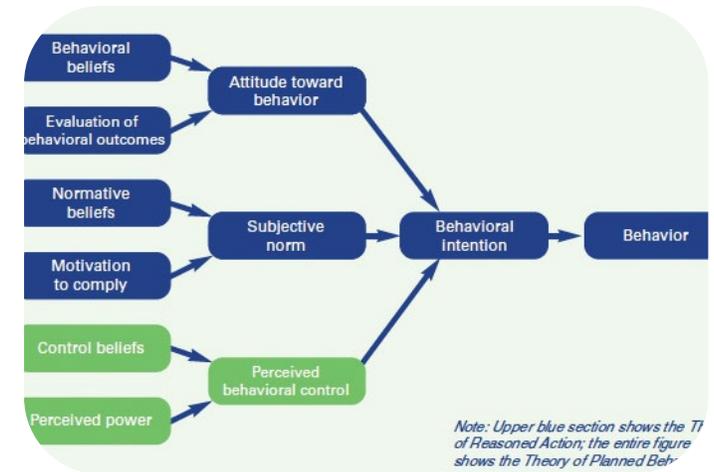


Diffusion of Innovations Theory (Rogers, 1995)

Bandura's Triadic Reciprocal Determinism



Social Cognitive Theory (Bandura, 1989)



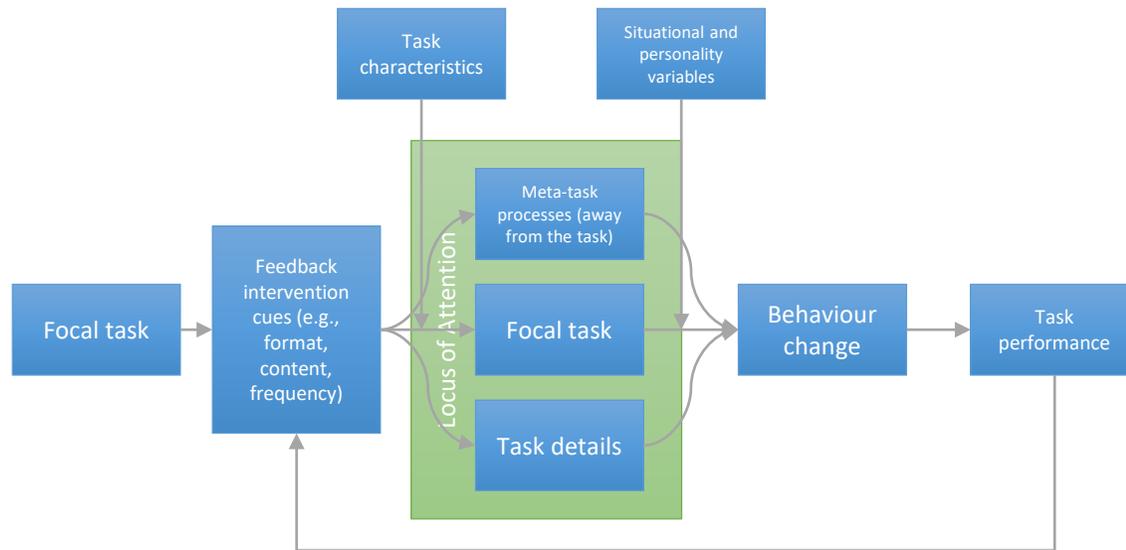
Theory of Planned Behavior (Ajzen, 1991)

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From Theory to Reality: An Example from Audit and Feedback

Using Theory to Inform Intervention Design

- Feedback Intervention Theory (Kluger and DeNisi, 1996)

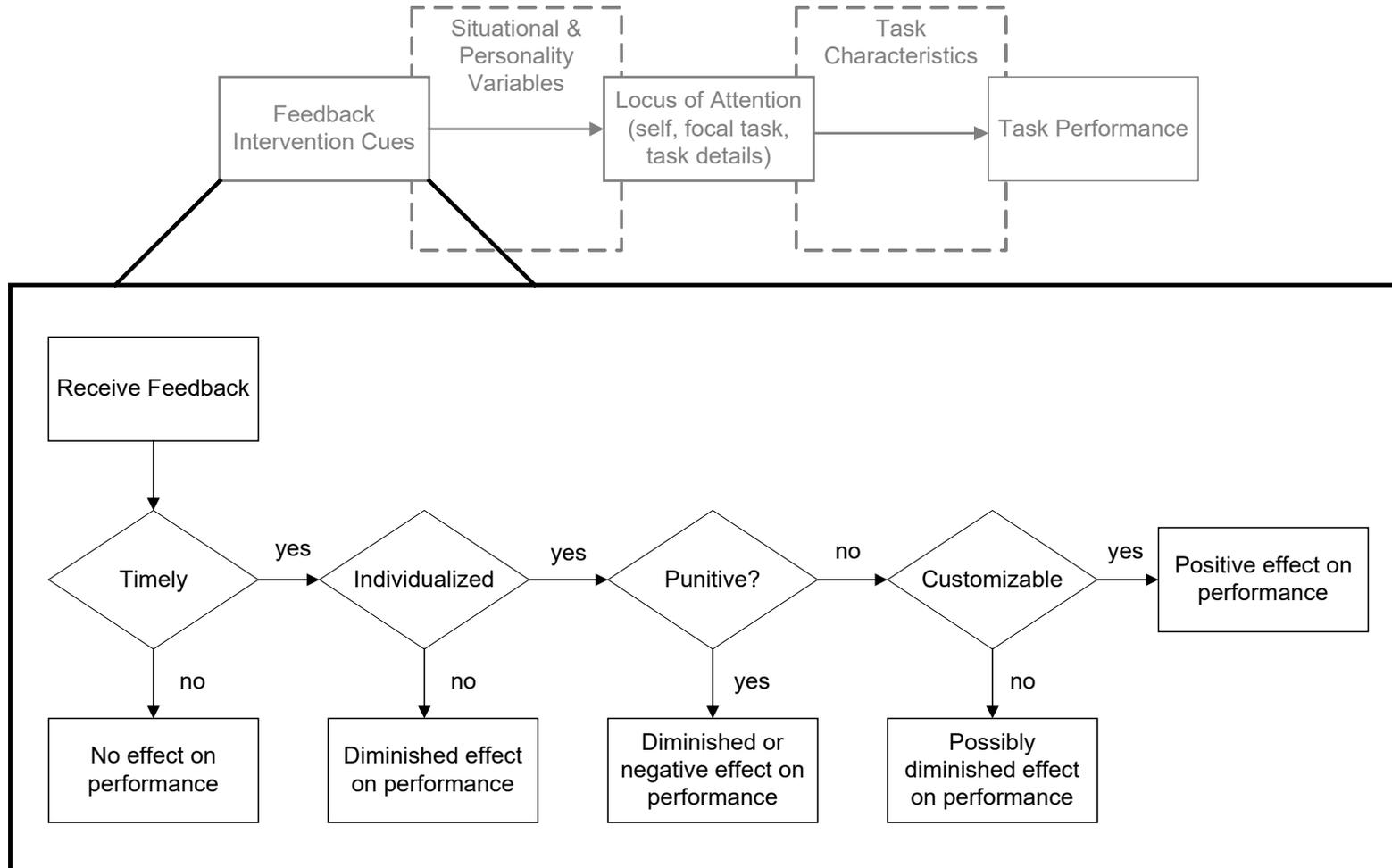


- Goal Setting Theory (Locke and Latham, 2002)
 - Goals direct attention and effort (like feedback does): they direct attention and effort toward goal relevant activities, and away from goal-irrelevant activities
 - Difficult, specific, but realistic goals produce highest levels of *effort, persistence, and performance*
 - Goal commitment, goal importance, and self-efficacy moderate goal setting's effect on performance

Feedback and goal setting work best together

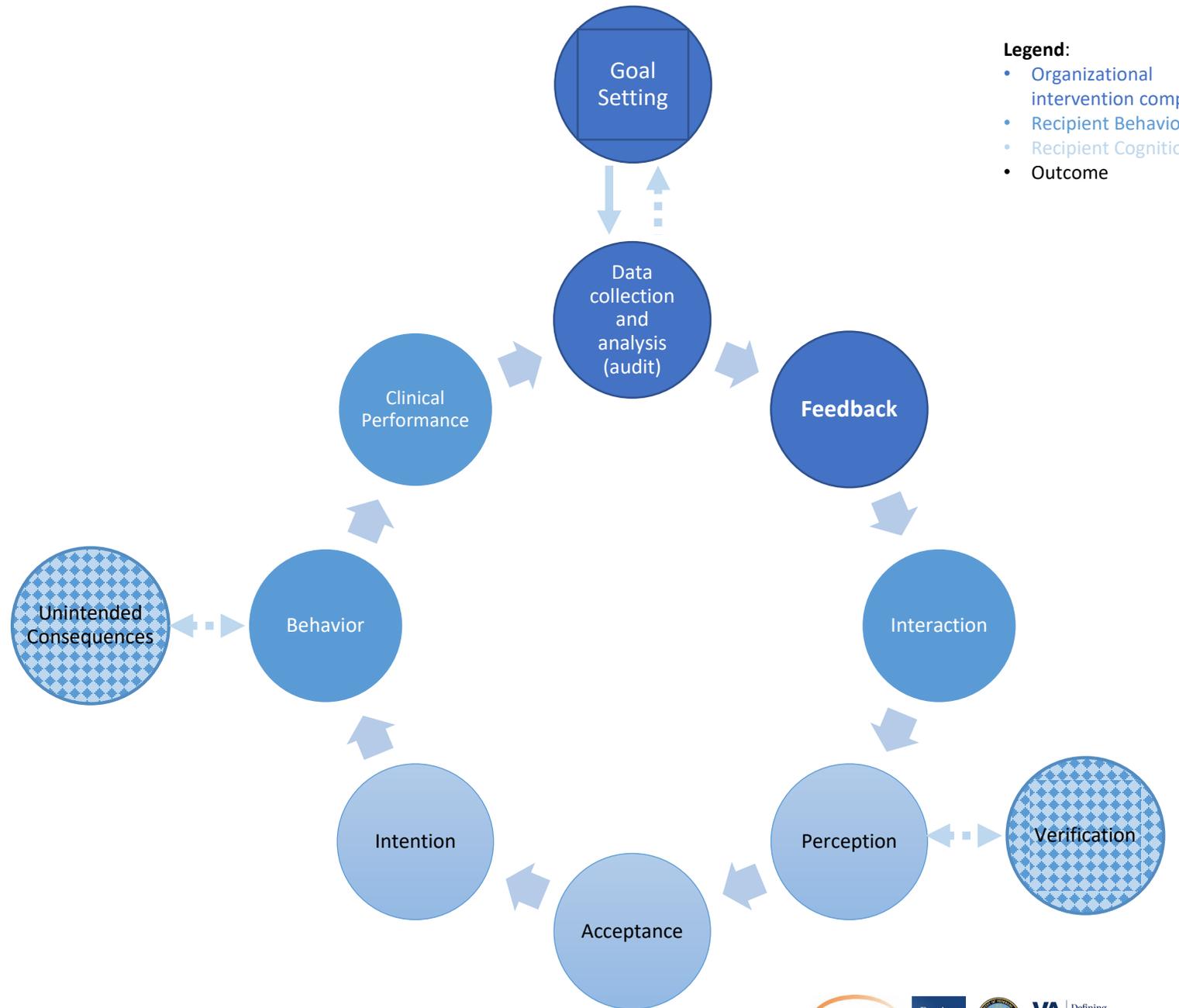
Healthcare Derivations of Theory

- A Model of Actionable Feedback (Hysong et al., 2006)



CP-FIT: The Feedback Cycle

Clinical Performance
Feedback Intervention Theory



How theory can help inform design choices

NARRATIVE REVIEW

Theory-based and evidence-based design of audit and feedback programmes: examples from two clinical intervention studies

Sylvia J Hysong,^{1,2} Harrison J Kell,³ Laura A Petersen,^{1,2}
Bryan A Campbell,⁴ Barbara W Trautner^{1,2}

► Additional material is published online only. To view please visit the journal online

ABSTRACT

Background Audit and feedback (A&F) is a

both cases interventions were received positively by feedback recipients.

Source: Hysong et al., 2016



Table 1 Factors predicted to impact feedback effectiveness by Feedback Intervention Theory and by Cochrane systematic review

Feedback characteristic	Brief definition	Impact on performance predicted by FIT	Meta-analytic findings from Kluger and DeNisi ¹¹	Meta-analytic findings from Hysong, ¹⁶ (healthcare specific)	Meta-analytic findings from Ivers <i>et al</i> ² Cochrane review (healthcare specific)
Feedback characteristics—content					
Sign of feedback intervention (FI)	Whether feedback (FB) was positive or negative	FIT has no specific prediction	No significant relation (n.s.)	Not explicitly tested	Not explicitly tested
Correct–incorrect	Whether the task was done correctly or incorrectly		n.s.	Not explicitly tested	
Correct solution*	Information about how to do the task correctly	+	+	+	
Velocity†	Change from previous time period	+	+	+	
Attainment level	Number of things produced	–	n.s.	Insufficient variance to test	
Normative information	Direct comparison with others	–	n.s.	Mixed findings	
Norms	Information about the performance of others	–	n.s.	Insufficient studies to test	
Discouraging FI	FB containing a destructive message or cues that discouraged the recipient	–	–	Insufficient studies to test	
Praise	FB containing cues that praised the recipient	–	–	Insufficient studies to test	
Feedback characteristics—format					
Verbal FI	FB (FB) delivered verbally	–	–	–	Small +
Written FI†	FB delivered in writing	+	n.s.	+	+
Both verbal and written	FB delivered both verbally and in writing	Not explicitly addressed	Not explicitly tested	Insufficient studies to test	Large +
Graphical FI†	FB delivered in a graphical format	+	n.s.	–	Not explicitly tested
Computer FI†	FB delivered by computer	+	+	Insufficient studies to test	
Public FI	FB delivered in a public setting	–	n.s.	Mixed findings	
Group FI*	FB referring to group performance	+	n.s.	+	
Individual FI	FB referring to individual performance	Assumed in the theory	Not explicitly tested	+	
Group + individual FI	FB referring to both individual and group performance	Not explicitly addressed	Not explicitly tested	+	
Situational and other variables					
FI frequency	How often FB is delivered	FIT has no specific prediction	–	+	Curvilinear relationship
Goal setting	Whether FB included difficult specific goals, moderate or ‘do your best’ goals or no goals	+	+	Insufficient studies to test	cf. ‘explicit, measurable target and action plan’

What does the evidence say about feedback design?

- **Frequency:** Give feedback frequently, but not too frequently ([Lam et al., 2011](#))
- **Timeliness:** Feedback should be timely, but encourage comparison across multiple time periods (Lurie & Swaminathan, 2009)
- **Content:** Providing correct solution information makes feedback more effective (Kluger & DeNisi, 1996; Hysong, 2009)
- **Customizability:** Feedback interventions should be customized (Hysong et al. 2006; Anseel et al. 2011, Chen & Mathieu 2008)
- **Individual Characteristics:** Take into account the characteristics of the feedback recipient (e.g., the lower your competence, the more likely to dismiss negative feedback (Sheldon et al. 2014)

How theory can help inform design choices

Table 2 Operationalisation of feedback design characteristics Case 1

Feedback characteristic	Operationalisation in Case 1
Feedback characteristics—content	
Sign of feedback intervention (FI)	Variable
Correct–incorrect	Highlighted decision tree in PowerPoint presentation, showing physicians’ choices at each decision point, and interactive hyperlinks revealing whether each choice was or was not guidelines compliant
Correct solution	<ol style="list-style-type: none"> 1. <i>Indirect information</i>: Everyone received copy of guideline algorithm reflecting evidence-based decision-making rules for differentiating between CAUTI and ASB 2. <i>Direct Information</i>: Highlighted decision path in PowerPoint presentation, with interactive hyperlinks providing rationale at each decision point
Velocity	Not applicable—feedback was given for each individual case, so attainment scores could not be computed
Attainment level	Not directly applicable—feedback was given for each individual case, so attainment scores could not be computed
Normative information	
Norms	Not used—focus was on the individual’s decision-making process
Discouraging FI	Not used—per FIT recommendations
Praise	Not used—per FIT recommendations
Feedback characteristics—format	
Verbal FI	Verbal walkthrough of PowerPoint presentation by trained research assistant, using a written script
Written FI	Script used by research assistant was given to participants to keep
Both verbal and written	See verbal FI and written FI for components
Graphical FI	Highlighted decision tree in PowerPoint presentation, showing physicians’ choices at each decision point
Computer FI	Interactive PowerPoint presentation
Public FI	Not used—per FIT recommendations
Group FI	Not used—per FIT recommendations
Individual FI	Each PowerPoint presentation tailored to each participant was about a specific clinical case they treated
Group + individual FI	Not applicable—groups were not subjects of interest

Source: Hysong et al., 2016

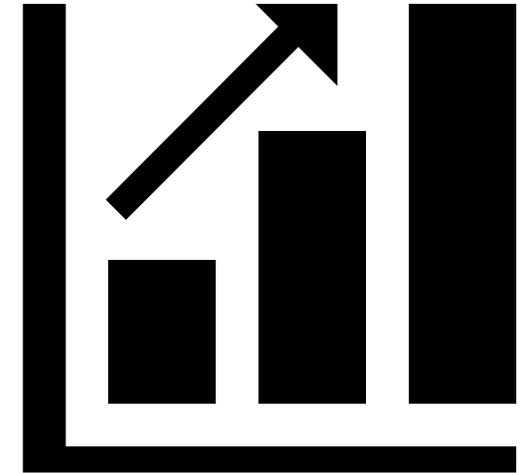
The Yin and Yang of Organizational Theory and Care Delivery Research



Integrating organizational theory into care delivery research



Gaps remaining in care delivery research



Advancing organizational theory through care delivery sciences

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Brown, B., Gude, W. T., Blakeman, T., van der Veer, S. N., Ivers, N., Francis, J. J., ... & Daker-White, G. (2019). Clinical performance feedback intervention theory (CP-FIT): a new theory for designing, implementing, and evaluating feedback in health care based on a systematic review and meta-synthesis of qualitative research. *Implementation Science*, 14(1), 40.
- Damschroder, LJ, Aron, DC, Keith, RE, Kirsh, SR, Alexander, JA, Lowery, JC (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science*, 4(1), 50
- Donabedian, A. (1988). The quality of care: How can it be assessed? *JAMA* 260, 1743-1748.
- Glasgow, R.E., Vogt, TM & Boles, SM (1999). Evaluating the public health impact of health promotion interventions: RE-AIM framework. *American Journal of Public Health*, 89(9), 1322-1327
- Hysong, S. J. (2009). Meta-analysis: audit & feedback features impact effectiveness on care quality. *Medical care*, 47(3), 356.
- Hysong, S. J., Best, R. G., & Pugh, J. A. (2006). Audit and feedback and clinical practice guideline adherence: making feedback actionable. *Implementation Science*, 1(1), 9.
- Hysong, S. J., Kell, H. J., Petersen, L. A., Campbell, B. A., & Trautner, B. W. (2017). Theory-based and evidence-based design of audit and feedback programmes: examples from two clinical intervention studies. *BMJ Qual Saf*, 26(4), 323-334.
- Kitson, A, Harvey, G & McCormack, B. (1998). Enabling the implementation of evidence based practice: a conceptual framework. *BMJ Quality & Safety*, 7(3), 149-158.
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological bulletin*, 119(2), 254.
- Lipscomb, J., Donaldson, M. S., Arora, N. K., Brown, M. L., Clauser, S. B., Potosky, A. L., ... & Taplin, S. H. (2004). Cancer outcomes research. *JNCI Monographs*, 2004(33), 178-197.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American psychologist*, 57(9), 705.
- Rogers, E. M. (2010). *Diffusion of innovations*. 4th ed. New York: The Free Press.
- Weaver, S. J., Che, X. X., Petersen, L. A., & Hysong, S. J. (2018). Unpacking Care Coordination Through a Multiteam System Lens. *Medical care*, 56(3), 247-259.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of management Review*, 14(3), 361-384.

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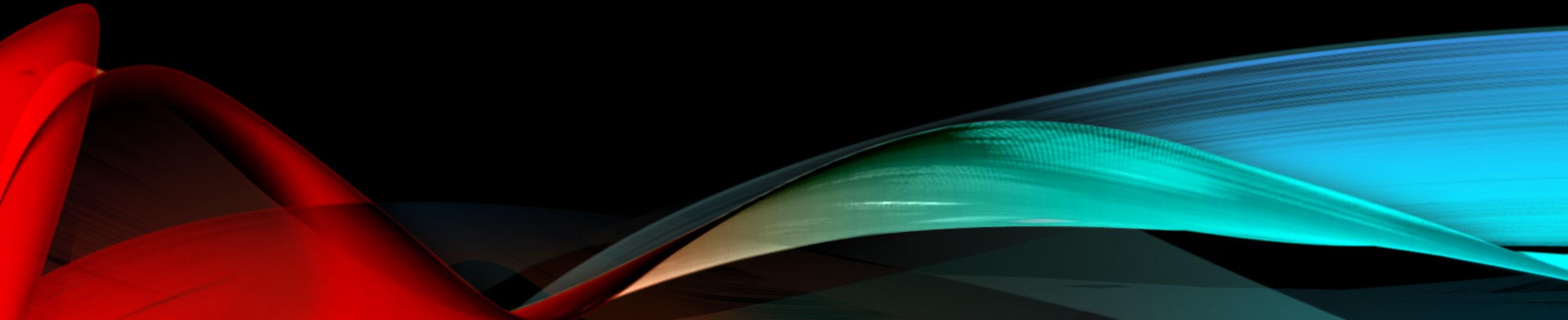
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GREG AARONS, PH.D.

Implementation of organizational interventions





Implementation of Organizational Interventions

GREGORY A. AARONS, PHD
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CHILD AND ADOLESCENT SERVICES RESEARCH CENTER

Presented at the Organizations in Healthcare Workshop,
National Cancer Institute, Shady Grove, MD. 15 October 2019

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 - ▶ R01DA038466 (Aarons)
 - ▶ No Conflicts of Interest to Disclose
- ▶ LOCI Motivational Interviewing in Substance Use Disorder Treatment Clinics
 - ▶ NIDA R01DA038466 (Aarons)
- ▶ TEAMS – ASD Interventions in Schools and Community Mental Health
 - ▶ Lauren Brookman-Frazee (UCSD/CASRC) NIMH R01MH111950
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 - ▶ Funding: Royal Norwegian Ministry of Health and Care Services

Aligning Leadership Across Systems and Organizations to Develop a Strategic Climate for Evidence-Based Practice Implementation

Gregory A. Aarons,^{1,2,4} Mark G. Ehrhart,³ Lauren R. Farahnak,^{1,2} and Marisa Sklar⁴

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Annu. Rev. Public Health 2014. 35:255-74

Keywords

Parmelli et al. *Implementation Science* 2011, **6**:33
<http://www.implementationscience.com/content/6/1/33>



SYSTEMATIC REVIEW

Open Access

The effectiveness of strategies to change organisational culture to improve healthcare performance: a systematic review

Elena Parmelli^{1,2*}, Gerd Flodgren¹, Fiona Beyer¹, Nick Baillie³, Mary Ellen Schaafsma⁴ and Martin P Eccles¹

Abstract

Background: Organisational culture is an anthropological metaphor used to inform research and consultancy and to explain organisational environments. In recent years, increasing emphasis has been placed on the need to change organisational culture in order to improve healthcare performance. However, the precise function of

Li et al. *Systematic Reviews* (2018) 7:72
<https://doi.org/10.1186/s13643-018-0734-5>

RESEARCH

Open Access

Organizational contextual features that influence the implementation of evidence-based practices across healthcare settings: a systematic integrative review

Shelly-Anne Li^{1,4*}, Lianne Jeffs^{2,3}, Melanie Barwick^{4,5,6} and Bonnie Stevens^{1,4,7}

Abstract

Background: Organizational contextual features have been recognized as important determinants for implementing evidence-based practices across healthcare settings for over a decade. However, implementation scientists have not reached consensus on which features are most important for implementing evidence-based practices. The aims of this review were to identify the most commonly reported organizational contextual features that influence the implementation

Turner et al. *Implementation Science* (2018) 13:105
<https://doi.org/10.1186/s13012-018-0799-5>

Implementation Science

RESEARCH

Open Access



Testing the organizational theory of innovation implementation effectiveness in a community pharmacy medication management program: a hurdle regression analysis

Kea Turner^{1*}, Justin G. Trogdon¹, Morris Weinberger¹, Angela M. Stover¹, Stefanie Ferreri², Joel F. Farley³, Neepa Ray⁴, Michael Patti², Chelsea Renfro⁵ and Christopher M. Shea⁶

ELSEVIER Preventive Medicine Available online 11 September 2019, 105832 In Press, Corrected Proof

PM Preventive Medicine

Advancing the use of organization theory in implementation science

Jennifer Leeman^a, Barbara Baquero^b, Miriam Bender^c, Mimi Choy-Brown^d, Linda K. Ko^e, Per Nilsen^f, Mary Wangen^g, Sarah A. Birken^h

<https://doi.org/10.1016/j.ypmed.2019.105832> Get rights and content

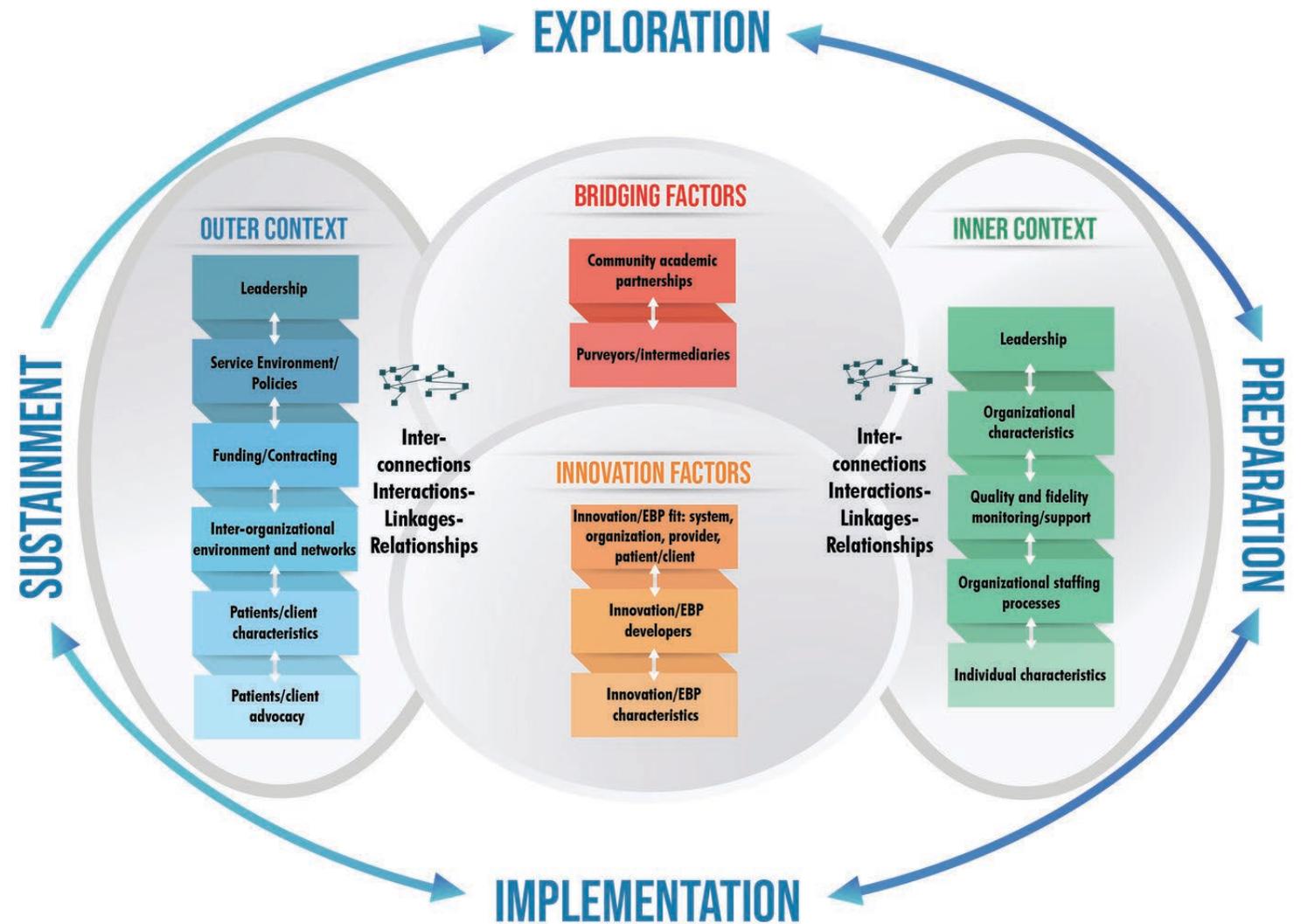
Highlights

- Factors in a setting's external environment or "outer setting" influence the implementation of interventions.
- Organizational theories offer a highly relevant but untapped resource for understanding outer setting level factors.

EPIS Implementation Framework

- Exploration
- Preparation
- Implementation
- Sustainment
- Outer Context
- Inner Context
- Bridging Factors
- Innovation Factors

<https://episframework.com>



Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 4-23.

Moullin, J. C., Dickson, K. S., Stadnick, N. A., Rabin, B., & Aarons, G. A. (2019). Systematic review of the exploration, preparation, implementation, sustainment (EPIS) framework. *Implementation Science*, 14(1), 1.

Leadership and Organizational Change for Implementation (LOCI)



Began with Leadership and Practice (LEAP) project NIMH R21

Co-creation with managers at mental health CBOs
NIMH R21MH082731



Challenge for health care = evidence-based business and management

Evidence-based leadership and management to improve implementation of EB care. Bass & Avolio (1994)



First Level Leadership + cross-level alignment and embedding mechanisms

Priestland & Hanig (2005); Schein (2010)



Goal is to improve focused/strategic climate for EBP Implementation and Sustainment

Ehrhart, M. G., Schneider, B., & Macey, W. H. (2013).

- ❖ Bass, B. M., & Avolio, B. J. (Eds.). (1994). *Improving organizational effectiveness through transformational leadership*. Sage.
- ❖ Ehrhart, M. G., Schneider, B., & Macey, W. H. (2013). *Organizational climate and culture: An introduction to theory, research, and practice*. Routledge.
- ❖ Priestland, A., & Hanig, R. (2005). Developing first-level leaders. *Harvard Business Review*, 83(6), 112-120.
- ❖ Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2). John Wiley & Sons.

Full Range Leadership

Inspirational Motivation
Intellectual Stimulation
Idealized Influence
Individualized Consideration
Contingent Reward
Standards

Implementation Climate

Focus, Recognition,
Selection, Evaluation
Expected
Supported
Rewarded

Implementation Leadership

Knowledgeable
Proactive
Supportive
Perseverant
Available

Embedding Mechanisms

Measurement/Feedback
Role Modeling
Resource Allocation
Recruit/Select/Promote

Bass, B. M., & Avolio, B. J. (Eds.). (1994). *Improving organizational effectiveness through transformational leadership*. Sage.

Ehrhart, M. G., Aarons, G. A., & Farahnak, L. R. (2014). Assessing the organizational context for EBP implementation: the development and validity testing of the Implementation Climate Scale (ICS). *Implementation Science*, 9(1), 157.

Aarons, G. A., Ehrhart, M. G., & Farahnak, L. R. (2014). The implementation leadership scale (ILS): development of a brief measure of unit level implementation leadership. *Implementation Science*, 9(1), 45.

Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2). John Wiley & Sons.

July 2017	August 2017	Sept. 2017	October 2017	Nov. 2017	Dec. 2017	Jan. 2018
	Individual Coaching Calls and Monthly Group Calls					
	MI Training	OSM Monthly Check-In Calls			Follow Up Training 1	
Study Overview Team Meeting	Audio Recording Training	OSM*			OSM*	Mid-Cohort team meeting
Assessment	LOCI Training			Assessment		

Feb. 2018	March 2018	April 2018	May 2018	June 2018	July/Aug 2018	Nov. 2018
Individual Coaching Calls and Monthly Group Calls						
OSM Monthly Check-In Calls		Follow Up Training 2	OSM Monthly Check-In Calls			OSM* Study Wrap-up
			OSM*		Graduation	
	Assessment			Final Standard Patient Interaction	OSM*	
					Assessment	Assessment

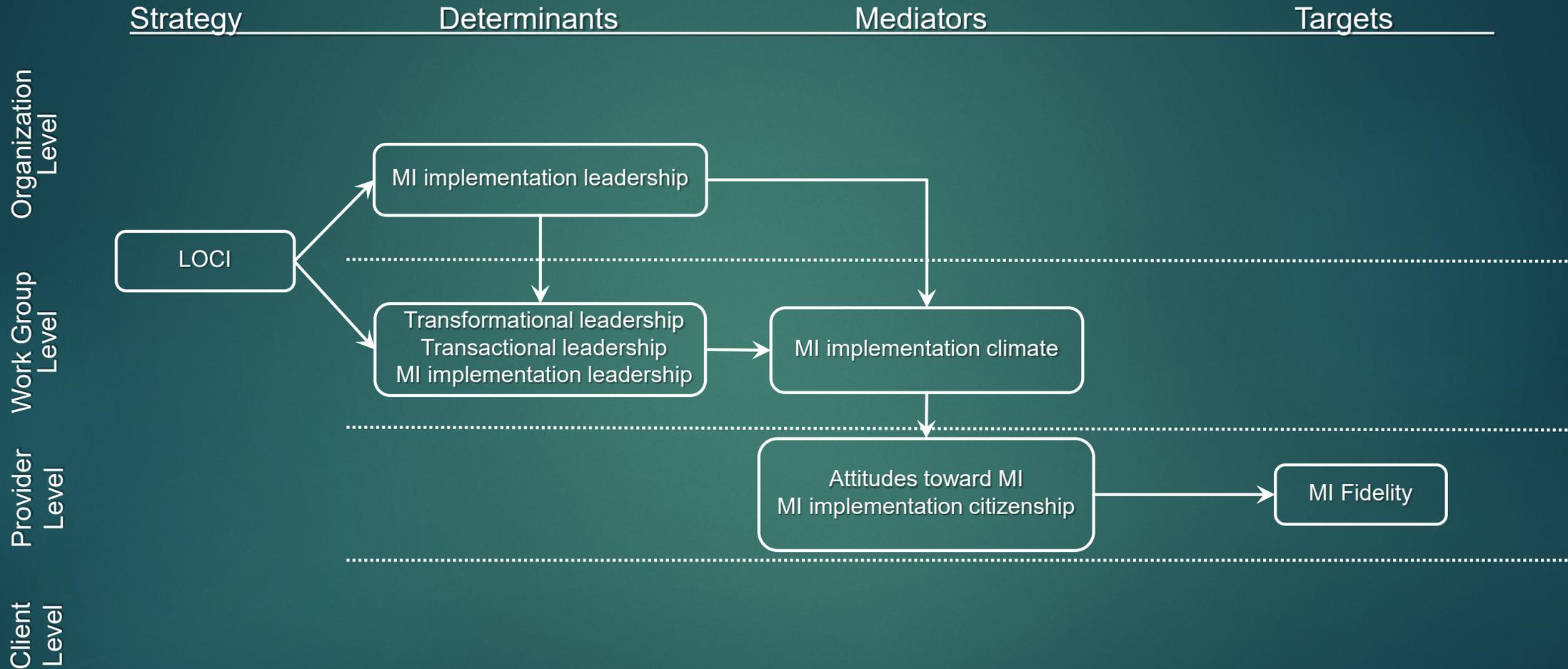
*OSM = Organizational Strategy Meeting

Aarons, G. A., Ehrhart, M. G., Moullin, J. C., Torres, E. M., & Green, A. E. (2017). Testing the leadership and organizational change for implementation (LOCI) intervention in substance abuse treatment: a cluster randomized trial study protocol. *Implementation Science*, 12(1), 29.

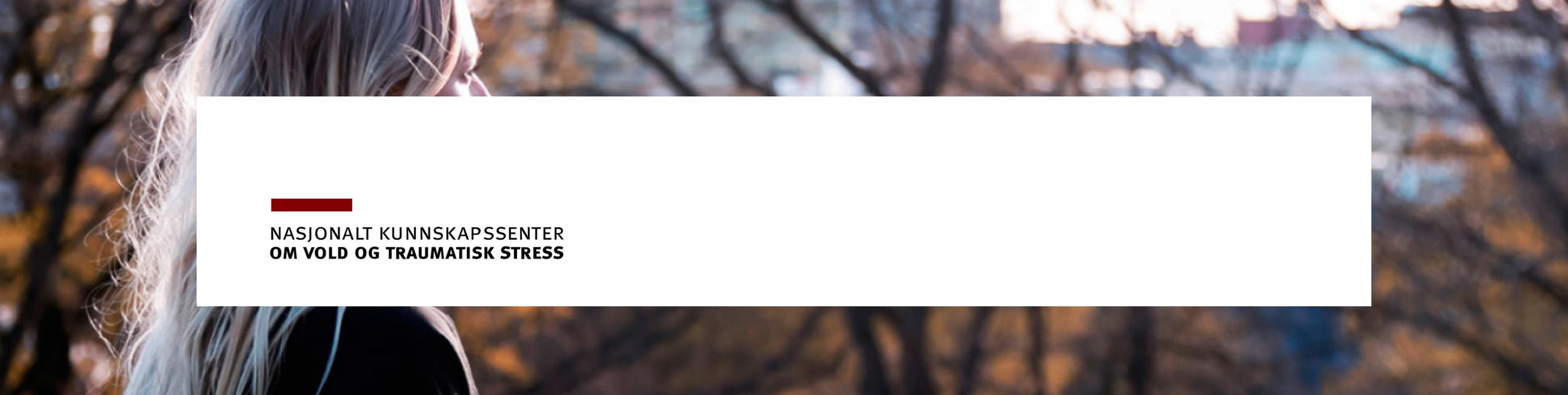
CHAOS Scenarios:	Time	Action Plan	Analytic Plan
1. LOCI leader transitions to supervise CONTROL team	B < 4	Change team from Control to LOCI, provide with LOCI organizational supports and embedding mechanisms from OSM climate development plan	Include team in analyses as LOCI, ADD TIME FRAME
	4 < 8	Change team from Control to LOCI, provide with LOCI organizational supports and embedding mechanisms from OSM climate development plan	Include team in analyses
	8 -12	Withhold LOCI organizational supports and embedding mechanisms from OSM climate development plan, stop coaching, do not share data from new team	Exclude team from analysis
2. LOCI leader leaves and is replaced by new hire	B < 4	Provide basic LOCI training ('LOCI Training Light' see description below) (e.g., RLAS webinar, Melbourne interview, etc.), use their existing team survey data for climate and their own perception of what leadership goals to work on (based on RLAS) for development plan, begin coaching. Revise development plan based on Wave 2 data for leadership, and team data for climate	
	4 < 8	Provide LOCI Training Light, use their existing team survey data for climate and their own perception of what leadership goals to work on (based on RLAS) for development plan, begin coaching. Revise development plan based on Wave 2 data for leadership, and team data for climate	
	8 -12	Provide LOCI Training Light, use their existing team survey data for climate and their own perception of what leadership goals to work on (based on RLAS) for development plan, begin coaching.	
3. LOCI leader leaves and no replacement	B < 4	Identify middle or upper management person to take on this role.	
	4 < 8	Identify middle or upper management person to take on this role.	
	8 < 12	Identify middle or upper management person to take on this role.	
4. CONTROL leader transitions to supervise LOCI team	B < 4	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	
	4 < 8	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	
	8 -12	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	
5. CONTROL leader leaves and is replaced by new hire	B < 4	New leader given access to webinar condition resources, will complete web-survey next administration	
	4 < 8	New leader given access to webinar condition resources, will complete web-survey next administration	
	8 -12	New leader given access to webinar condition resources, will complete web-survey next administration	
7. CONTROL leader leaves and interim replacement	B < 4	Interim leader given access to webinar condition resources, will complete web-survey next administration	
	4 < 8	Interim leader given access to webinar condition resources, will complete web-survey next administration	
	8 -12	Interim leader given access to webinar condition resources, will complete web-survey next administration	

8. LOCI leader overseeing LOCI and CONTROL team simultaneously	B < 4	Change team from Control to LOCI, provide with LOCI organizational supports and embedding mechanisms from OSM climate development plan	Include team in analyses as LOCI, ADD TIME FRAME
	4 < 8	Change team from Control to LOCI, provide with LOCI organizational supports and embedding mechanisms from OSM climate development plan	Include team in analyses
	8 < 12	Withhold LOCI organizational supports and embedding mechanisms from OSM climate development plan, stop coaching, do not share data from new team	Exclude team from analysis
9. Executive overseeing LOCI Team	B < 4	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	
	4 < 8	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	
	8 < 12	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	
10. Executive overseeing CONTROL Team	B < 4	New leader given access to webinar condition resources, will complete web-survey next administration	
	4 < 8	New leader given access to webinar condition resources, will complete web-survey next administration	
	8 < 12	New leader given access to webinar condition resources, will complete web-survey next administration	
11. LOCI Counselor promoted to CONTROL team leader	B < 4	New leader given access to webinar condition resources, will complete web-survey next administration	
	4 < 8	New leader given access to webinar condition resources, will complete web-survey next administration	
	8 < 12	New leader given access to webinar condition resources, will complete web-survey next administration	
12. CONTROL counselor promoted to LOCI leader	B < 4	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	
	4 < 8	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	
	8 < 12	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	
13. LOCI counselor promoted to LOCI team leader	B < 4	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, use their own data for leadership, and team data for climate and attend 4 & 8 month boosters	
	4 < 8	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, use their own data for leadership, and team data for climate and attend 8 month booster	
	8 < 12	Provide LOCI Training Light, use their own existing survey data for 360 feedback and development plan, begin coaching, Use their own data for leadership, and team data for climate	

Mechanisms: LOCI NIDA



Aarons, G. A., Ehrhart, M. G., Moullin, J. C., Torres, E. M., & Green, A. E. (2017). Testing the leadership and organizational change for implementation (LOCI) intervention in substance abuse treatment: a cluster randomized trial study protocol. *Implementation Science*, 12(1), 29.



**NASJONALT KUNNSKAPSSENTER
OM VOLD OG TRAUMATISK STRESS**

Translation and adaptation of LOCI for implementation of evidence-based treatment of PTSD in Norwegian child and adult mental health care services

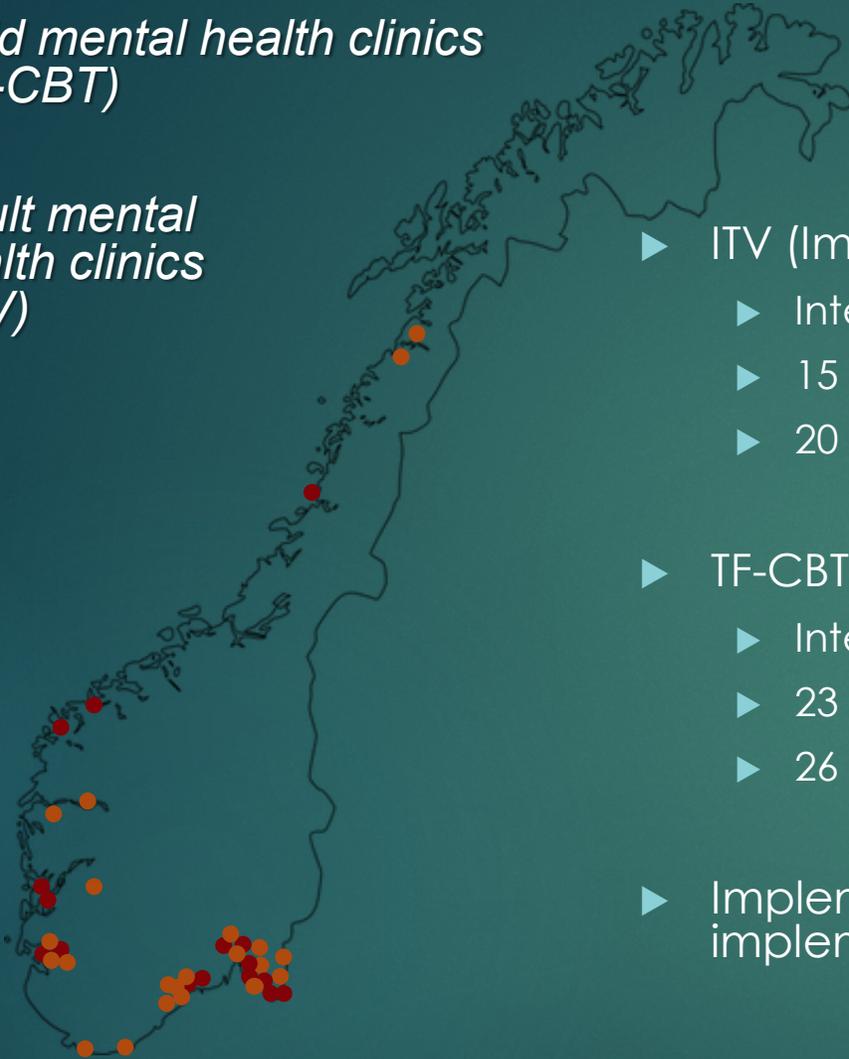
Norwegian Centre for Violence and Traumatic Stress Studies (NKVTS), Norway

Thanks to: Erlend Høen Laukvik; Ane-Marte Solheim Skar; Karina Myhren Egeland

LOCI Norway

● Child mental health clinics
(TF-CBT)

● Adult mental health clinics
(ITV)



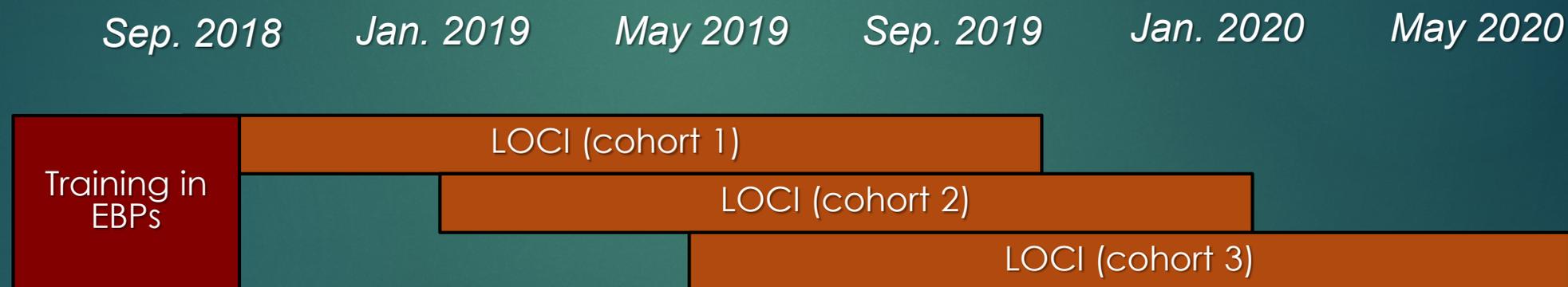
- ▶ ITV (Implementation of trauma treatment in adult clinics)
 - ▶ Interventions: Screening, EMDR and CT-PTSD
 - ▶ 15 adult clinics
 - ▶ 20 leaders, 15 executives, 120 therapists, about 300 patients
- ▶ TF-CBT (Implementation of TF-CBT in child clinics)
 - ▶ Intervention: screening and TF-CBT
 - ▶ 23 child clinics
 - ▶ 26 leaders, 8 executives, 100 therapists, about 300 patients
- ▶ Implementation study started in 2018 (TF-CBT have been implemented in CAMHS since 2012)

The study and research aims

- ▶ Evaluate the **effectiveness of LOCI** in supporting the implementation of evidence-based treatment for PTSD
 1. Knowledge about the effect of LOCI on full-range leadership, implementation leadership, and implementation climate in a Norwegian setting (proximal)
 2. Knowledge about the effect of LOCI on fidelity and patient outcomes (distal)
 3. Inform coordinated and tailored implementation strategies to enhance effective implementation in mental health services

The study and research aims

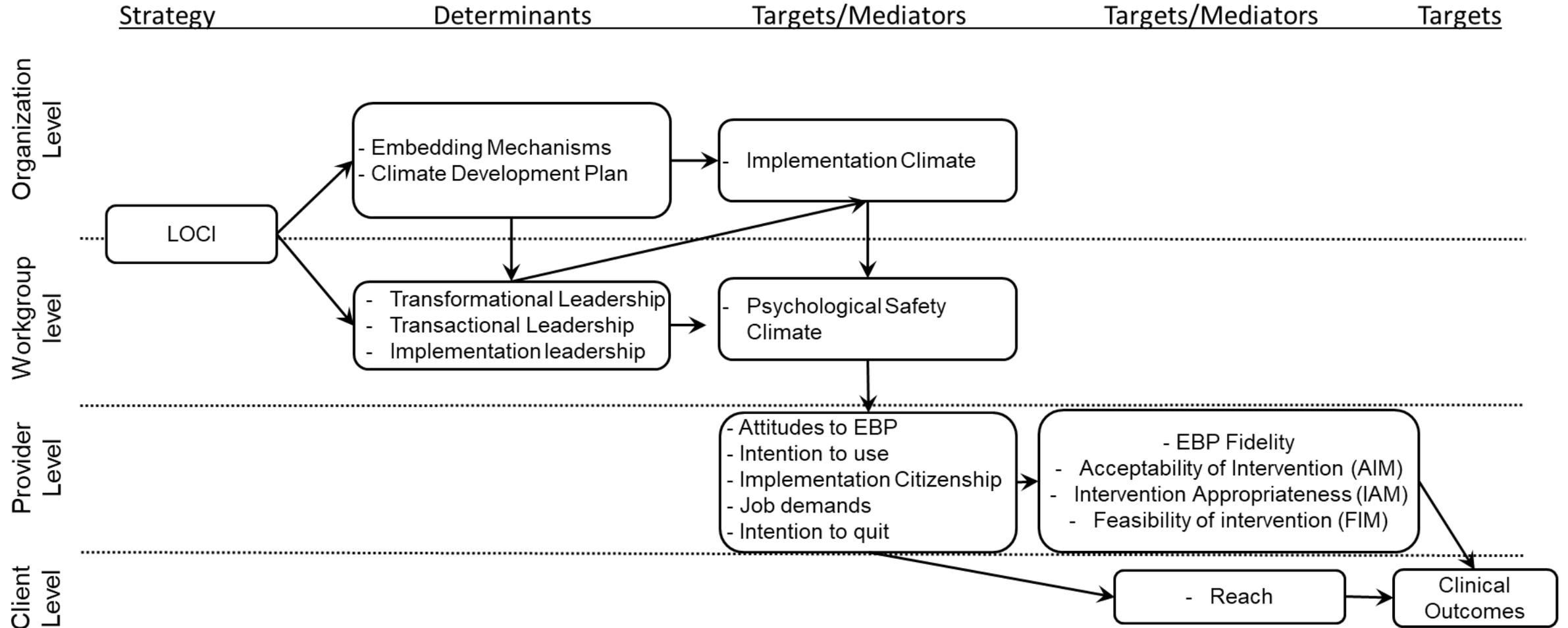
- ▶ **Hybrid type III design** – testing LOCI while gathering information on the PTSD interventions and their related outcomes
- ▶ Stepped wedge cluster randomized design



Egeland, K. M., Solheim Skar, A. M., Endsjø, M., Laukvik, E. H., Bækkelund, H., Babaii, A., . . . Aarons, G. (2019). Testing the Leadership and Organizational Change for Implementation (LOCI) intervention in Norwegian mental health clinics: A stepped-wedge cluster randomized design study protocol. *Implementation Science*.

Curran, G. M., Bauer, M., Mittman, B., Pyne, J. M., & Stetler, C. (2012). Effectiveness-implementation hybrid designs: combining elements of clinical effectiveness and implementation research to enhance public health impact. *Medical care*, 50(3), 217–226.

LOCI Norway – Determinants – Mechanisms - Targets



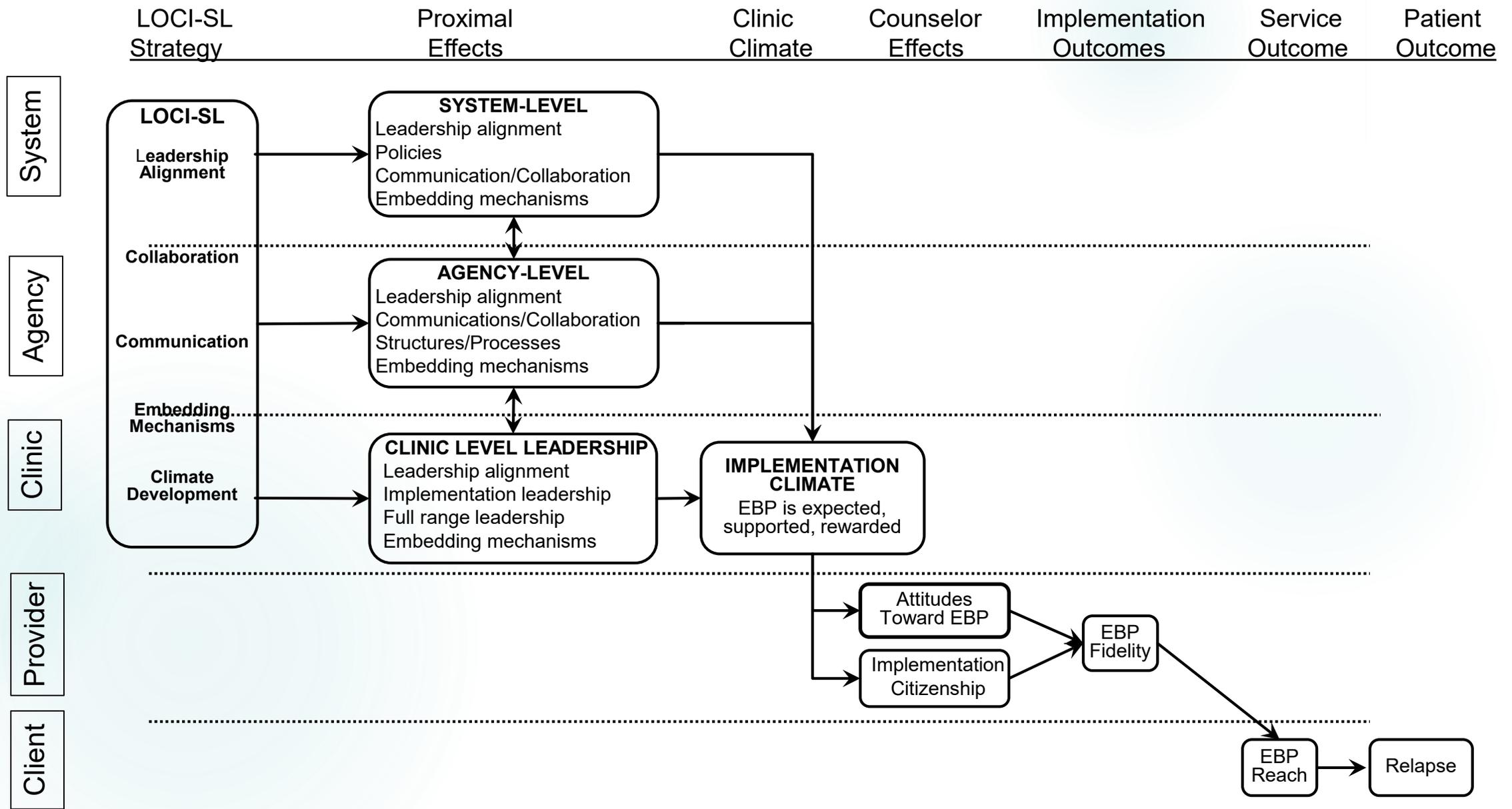


Figure 1. Effects of LOCI-SL at System, Agency, Clinic, Counselor & Client Levels
 Aarons, G. A., Ehrhart, M. G., Farahnak, L. R., & Sklar, M. (2014). Aligning leadership across systems and organizations to develop a strategic climate for evidence-based practice implementation. *Annual review of public health, 35*.

Contact:

Gregory A. Aarons, Ph.D.

Professor: UC San Diego, Department of Psychiatry
Director: Child & Adolescent Services Research Center

E-mail: gaarons@ucsd.edu

Twitter: @Greg_Aarons

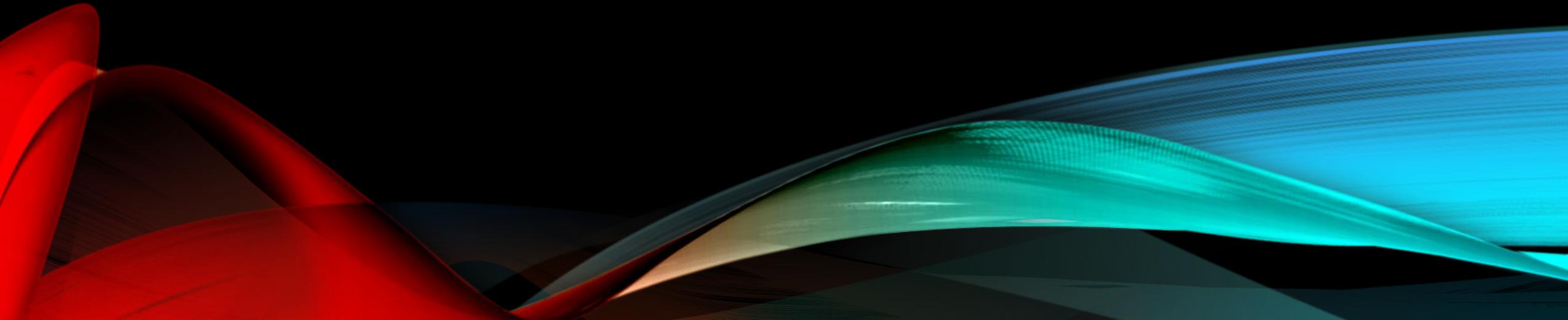
LOCI: <http://implementationleadership.com>

EPIS: <https://episframework.com/>

Web: <https://profiles.ucsd.edu/gregory.aarons>

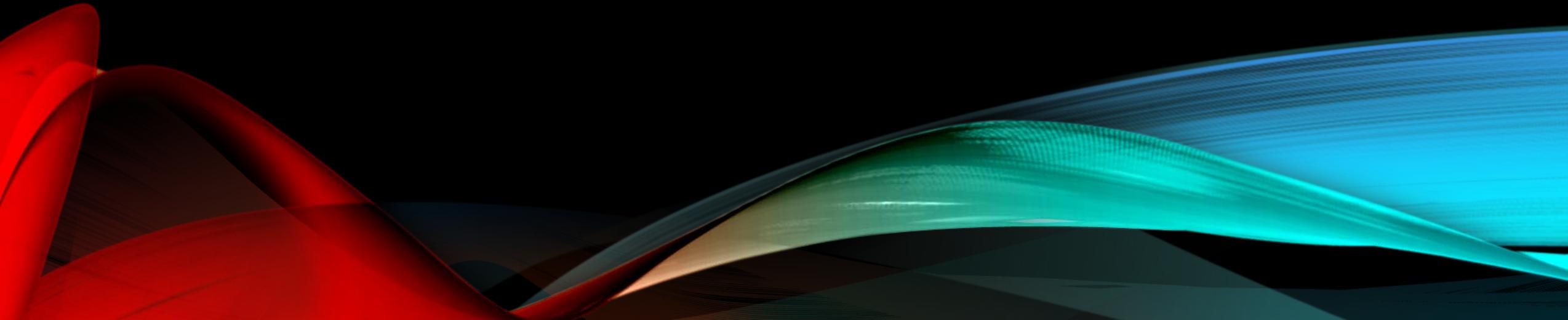
MORNING BREAK

10:30-10:45AM



JOSE ESCARCE, M.D., PH.D.

Measuring organizational factors



Measuring Organizational Characteristics of Health Systems

José J. Escarce, M.D., Ph.D.

University of California at Los Angeles

RAND Center of Excellence on Comparative Health System Performance

Organizations in Healthcare Workshop

National Cancer Institute

October 15, 2019

Outline of Talk

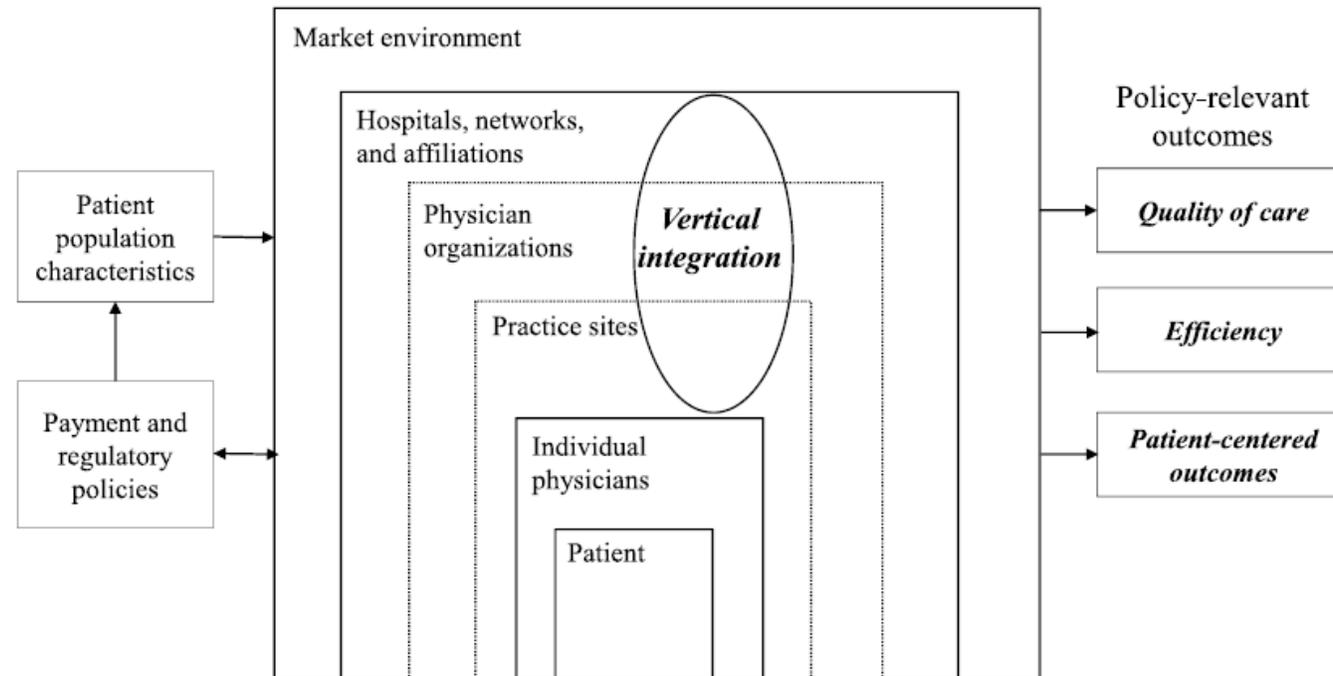
- Importance of health system characteristics
- Conceptual framework
- Some findings from the literature
- The work of the RAND Center of Excellence
- Summary

Importance of Health System Characteristics

- Vertical integration of hospitals and physician organizations (and possibly other providers), the key feature of health systems, is assumed to affect the cost and quality of care patients receive
- However, beyond the constant of vertical integration per se, the nature of the integration arrangements and the characteristics of the resulting systems can vary enormously
 - These, too, are believed to influence the care patients receive

Conceptual Framework

Conceptual framework for vertically integrated health system performance



Source: Machta et al. (2019)

Some Findings From the Literature

- Most studies are limited to comparing providers that are in vertically integrated systems to providers that are not
 - A few studies consider the characteristics of health systems (e.g., degree of centralization)
- The evidence in most studies is of “low quality”
 - Most studies are cross-sectional, report associations, and do not address selection of providers into health systems

Some Findings From the Literature

- Quality of care
 - Disease-specific quality measures (e.g., prostate cancer, colon cancer, diabetes)
 - Cancer screening
 - Hospital outcomes (e.g., mortality, complications, readmissions)
 - Results are mixed, although more studies find better quality in health systems than vice versa

Some Findings From the Literature

- Costs of care
 - Most studies focus on prices, utilization, or expenditures
 - Most studies examine hospital care, though some look at physician services
 - The preponderance of the evidence indicates that prices and costs are higher in health systems

Some Findings From the Literature

- From the California Health Care Foundation:

Is Vertical Integration Bad for Health Care Consumers?

Stories that caught our attention this week

JUNE 21, 2019



OCTOBER 2019

The Sky's the Limit: Health Care Prices and Market Consolidation in California

The image shows a logo for the California Health Care Foundation (CHCF) on the left, featuring a white silhouette of California inside a circle with the acronym 'CHCF' below it. To the right of the logo is a grey rectangular area with the text 'Policy Brief' in white. Further right is an orange square with a white curved line. In the top right corner of the banner, the date 'OCTOBER 2019' is written in a small, dark font. Below the banner, the title 'The Sky's the Limit: Health Care Prices and Market Consolidation in California' is displayed in a dark blue font.

The RAND COE

Objectives:

- Enumerate and characterize health systems in the United States
 - Characterize system-affiliated and unaffiliated physician organizations and the Medicare beneficiaries they serve
- Assess health system performance
- Examine the association between health system characteristics and performance

Some Findings From the Literature

- Costs of care
 - Most studies focus on prices, utilization, or expenditures
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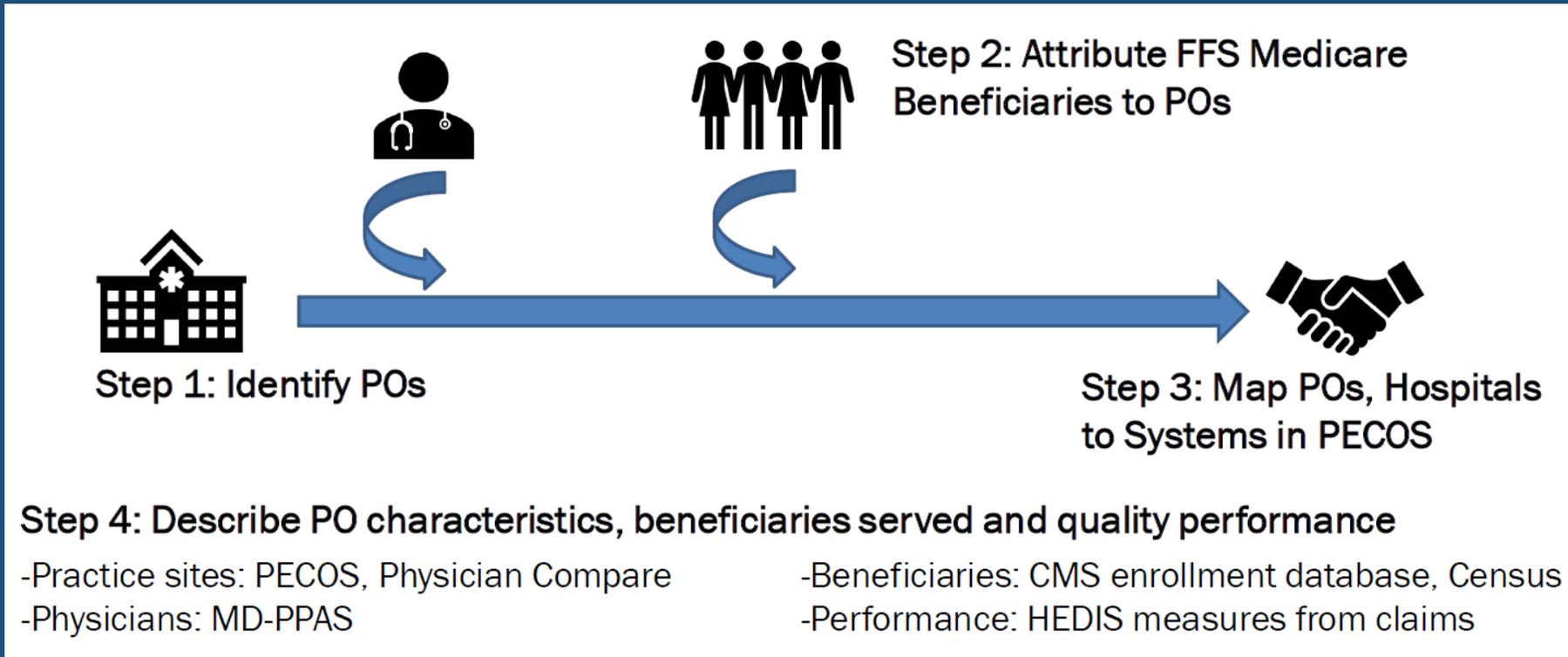
- Enumerate and characterize health systems in the United States
 - Characterize system-affiliated and unaffiliated physician organizations and the Medicare beneficiaries they serve
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Data Sources

Data sources (2013-2016):

- Medicare Provider Practice and Specialty (MD-PPAS)
- Medicare Provider Enrollment, Chain, and Ownership System (PECOS)
- Medicare enrollment and claims data
- Medicare Provider of Services file
- Medicare Hospital Compare
- Medicare Physician Compare
- Internal Revenue Service Form 990
- American Hospital Association Annual Survey
- Healthcare Information and Management Systems Society (HIMSS) database
- Several others

Working With the Data



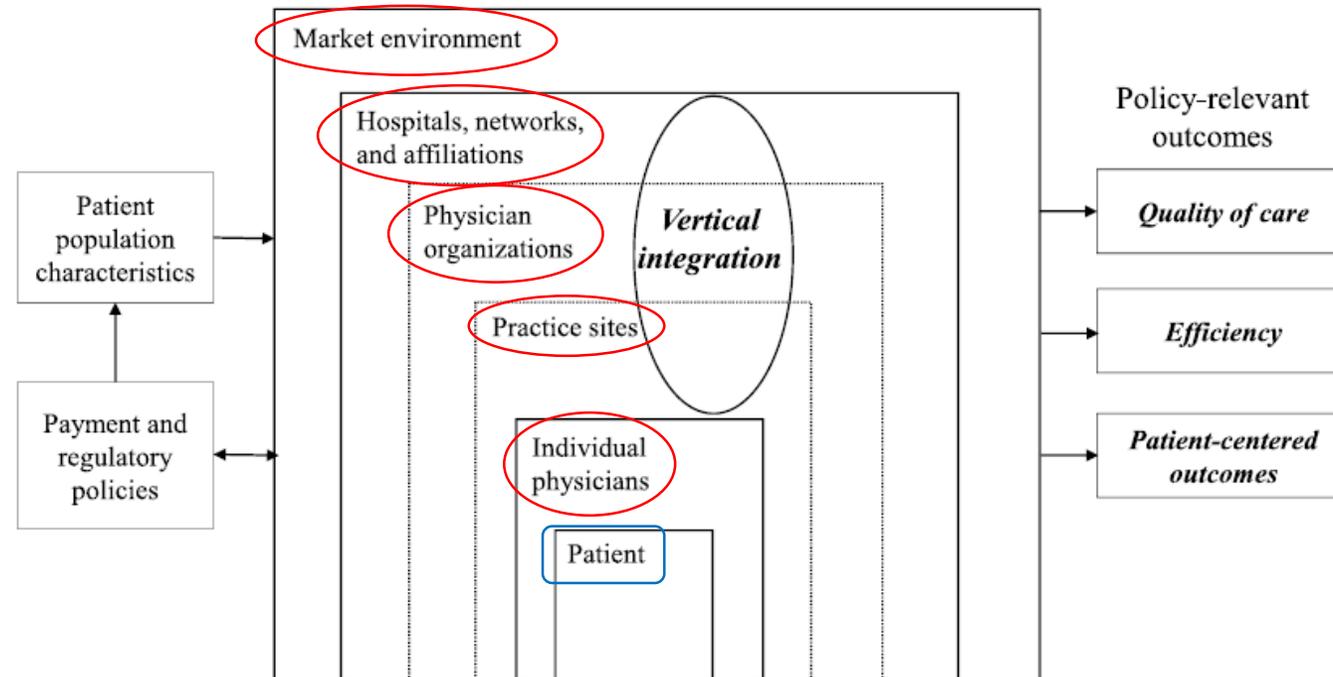
Measuring System Characteristics

System characteristics:

- Location (Hospital Referral Region)
- Number of physicians and detailed specialty composition
- Number of advance practice nurses and physician assistants
- Number of practice sites and their locations
 - Urban, suburban, small town, rural
- Number of hospitals and their characteristics
- Number of Medicare beneficiaries and their characteristics
- Measures of competition and market share
- Ownership type
- Academic system
- HIT adoption and use (partial data)
- Participation in alternative payment models

We Touch on All the Dimensions in the Conceptual Framework

Conceptual framework for vertically integrated health system performance



Source: Machta et al. (2019)

System Size Varies Greatly

Size Distribution and Inclusion of Oncologists in 1397 Health Systems, 2015

No. of physicians	No. of systems	No. of systems with oncologist	Percentage with oncologist
<50	920	83	9.0%
50-99	108	60	55.6%
100-249	133	89	66.9%
250-499	86	78	90.7%
500-999	85	83	97.6%
1000+	65	65	100.0%

Source: RAND COE analysis of Medicare data.

Large Physician Organizations Are Much More Likely to Be in Systems

Participation of Physician Organizations in Systems, by Physician Organization Size

PO size	Total no. of POs	No. of POs in systems	Percentage of POs in systems
Solo physicians	82,448	349	<0.5%
2-4	21,049	628	3.0%
5-9	6,943	557	8.0%
10-24	3,466	577	16.7%
25-49	1,115	296	26.6%
50-99	619	226	36.5%
100+	686	686	60.9%

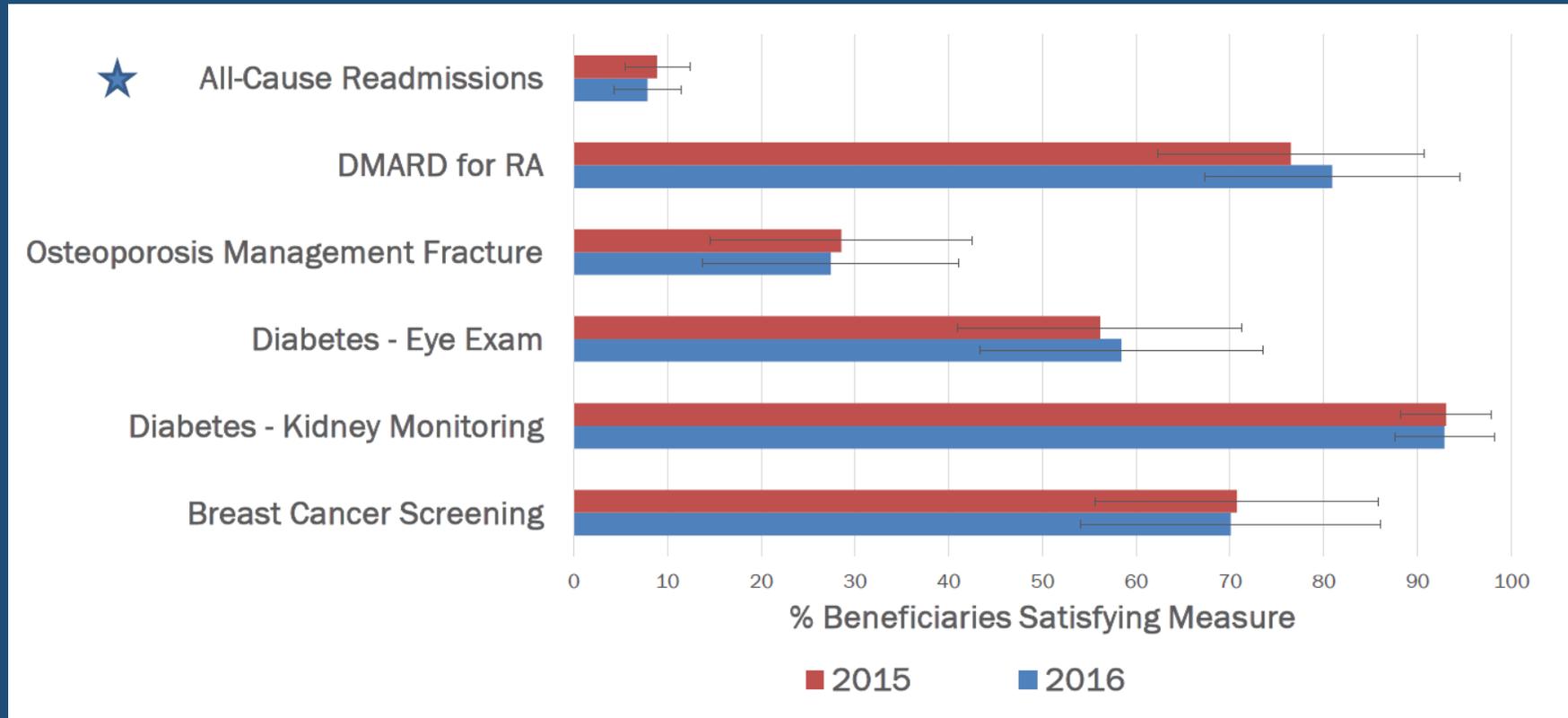
Source: RAND COE analysis of Medicare data.

Measuring System Performance

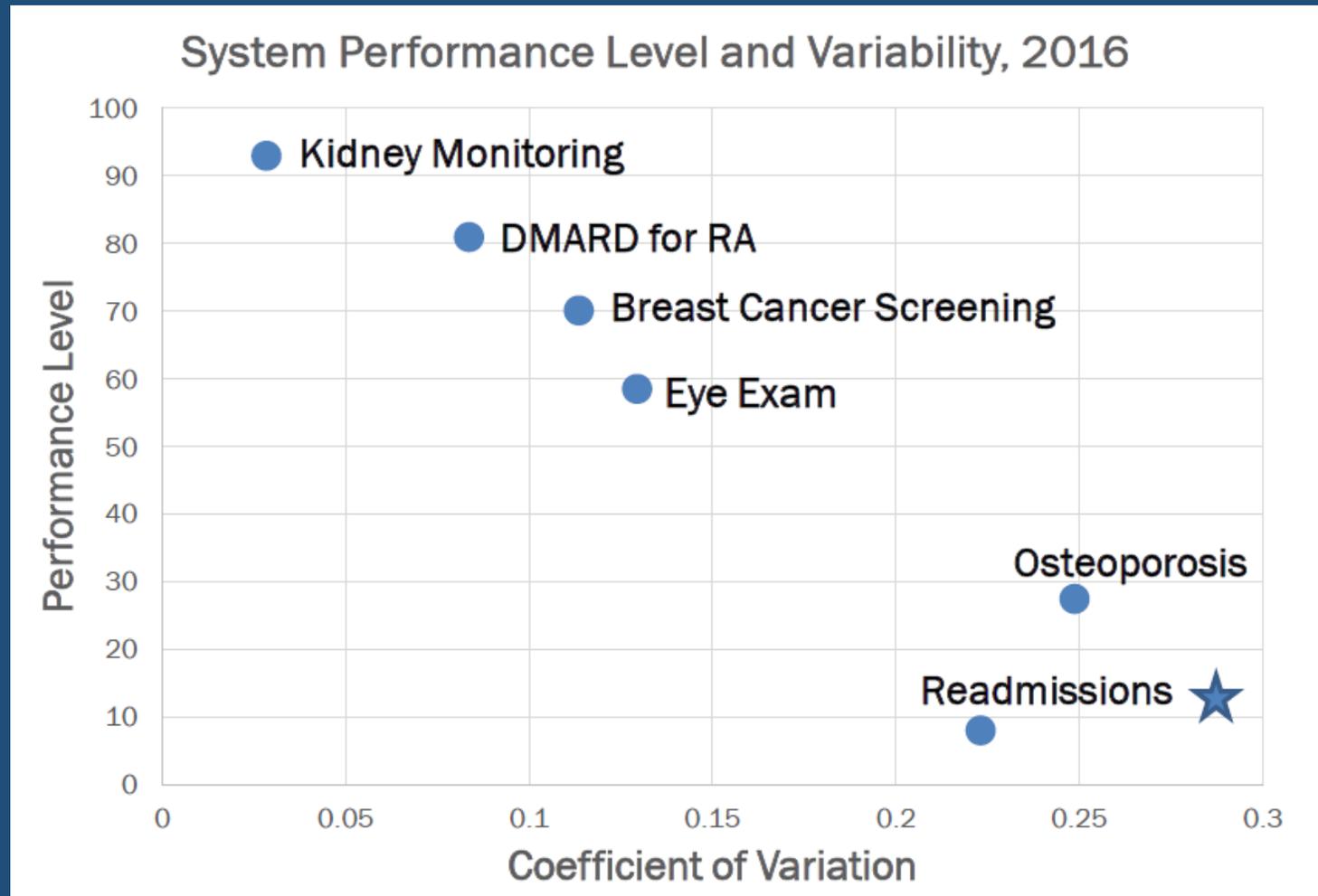
System performance measures:

- Clinical performance measures (HEDIS)
 - Cancer screening, chronic disease management, high-risk medications
- Low-value care measures
 - Unnecessary imaging, opiates for back pain, unnecessary antibiotics, annual EKGs
- Hospital-based measures
 - Mortality, all-cause readmissions
- Costs of care
 - Total and components (e.g., physician services, hospital inpatient, hospital outpatient, post-acute care, etc.)

Average System Performance Varies Across Measures



Measure-Specific Performance Varies Across Systems to Differing Degrees



A Key Issue

- The characteristics of health systems we can measure with secondary data are “structural” irrespective of which dimension of the conceptual framework they pertain to
- The most important factors affecting health system performance may not be captured in secondary data

A Key Issue

- The characteristics of health systems we can measure with secondary data are “structural” irrespective of which dimension of the conceptual framework they pertain to
- The most important factors affecting health system performance may not be captured in secondary data
- If so, we all know the cliché :



RAND COE Mixed Methods Study: Design

- Purposive sample of 24 health systems and one of their physician organizations
- “Virtual” site visits consisting of 90-minute semi-structured interviews with 5-8 executives at the health system level and 3 at the physician organization level

RAND COE Mixed Methods Study: Data Collection

- Interviews included questions on:
 - History
 - Market context and strategies
 - Governance and management of system and components
 - Leadership and culture
 - Locus of decision making
 - Commitment to “care redesign”
 - Quality improvement and moving evidence to practice
 - Payment methods and assumption of financial risk
 - Compensation at all levels
 - Performance measurement
 - Use of health information technology
- Post-interview survey included additional questions

RAND COE Mixed Methods Study: Some Preliminary Findings

- Cross-system and within-system variation in:
 - Organization and governance
 - Core and peripheral components of systems
 - E.g., 9 distinct types of relationships between systems and their physicians
 - Strategies to address competition
 - Acquiring or merging with potential competitors vs. affiliating with them in arrangements that leave them independent
 - Levers used to influence performance
 - Often vary between core and peripheral components
 - Locus of decision making
 - On a spectrum from highly centralized to decentralized

Summary

- Vertical integration, per se, is associated with higher prices and costs and several studies suggest it may be associated with higher quality as well
 - An important caveat is that most studies provide “low quality” evidence”
- The characteristics of vertically integrated health systems vary enormously, but there is little research on whether and how these characteristics matter

Summary

- It is possible to measure “structural” characteristics of health systems using secondary data sources
- However, there are two huge challenges to research of the relationship between health system characteristics and performance
 - Difficult to measure attributes may be as or more important than structural ones
 - Moving beyond associations to identify and estimate causal effects is likely to require natural experiments that are hard to come by

BRIAN MITTMAN, PH.D.

*Challenges in evaluating
organizational interventions*



Kaiser Permanente
RESEARCH



Challenges in Evaluating Organizational Interventions: *Studying Intervention Mediators, Moderators and Mechanisms*

October 15, 2019

Brian S. Mittman, PhD

Dept of Research and Evaluation, Kaiser Permanente Southern California
Clinical and Translational Science Institute, University of California at Los Angeles
Suzanne Dworak-Peck School of Social Work, University of Southern California

Policy/practice decision makers' questions



Does it work? Is it “effective”?

- *Should it be approved?
Funded? Promoted?
Mandated?*
- *Included in the formulary?*
- *Should I use it?*

“Is the intervention Effective?”

How do we (researchers) answer?

- *Do outcomes differ for those receiving the intervention vs. not (or intervention A vs. B)?*
- *Do selected features of intervention settings and targets influence effects?*
- *Gold standard method: randomize and measure outcome differences; perform subgroup analyses ... or use other impact-focused designs*
- *Focus is on **impact***



Policy/practice decision makers' questions

Does it work? Is it “effective”?

- For some drugs, the answer is “Yes, for many/most patients” (but *cf* precision medicine)
- For *robust* complex interventions (e.g., some health promotion programs, healthcare delivery innovations) the answer is “Yes, often enough”
- For *most* complex interventions, the answer is “sometimes...it depends”



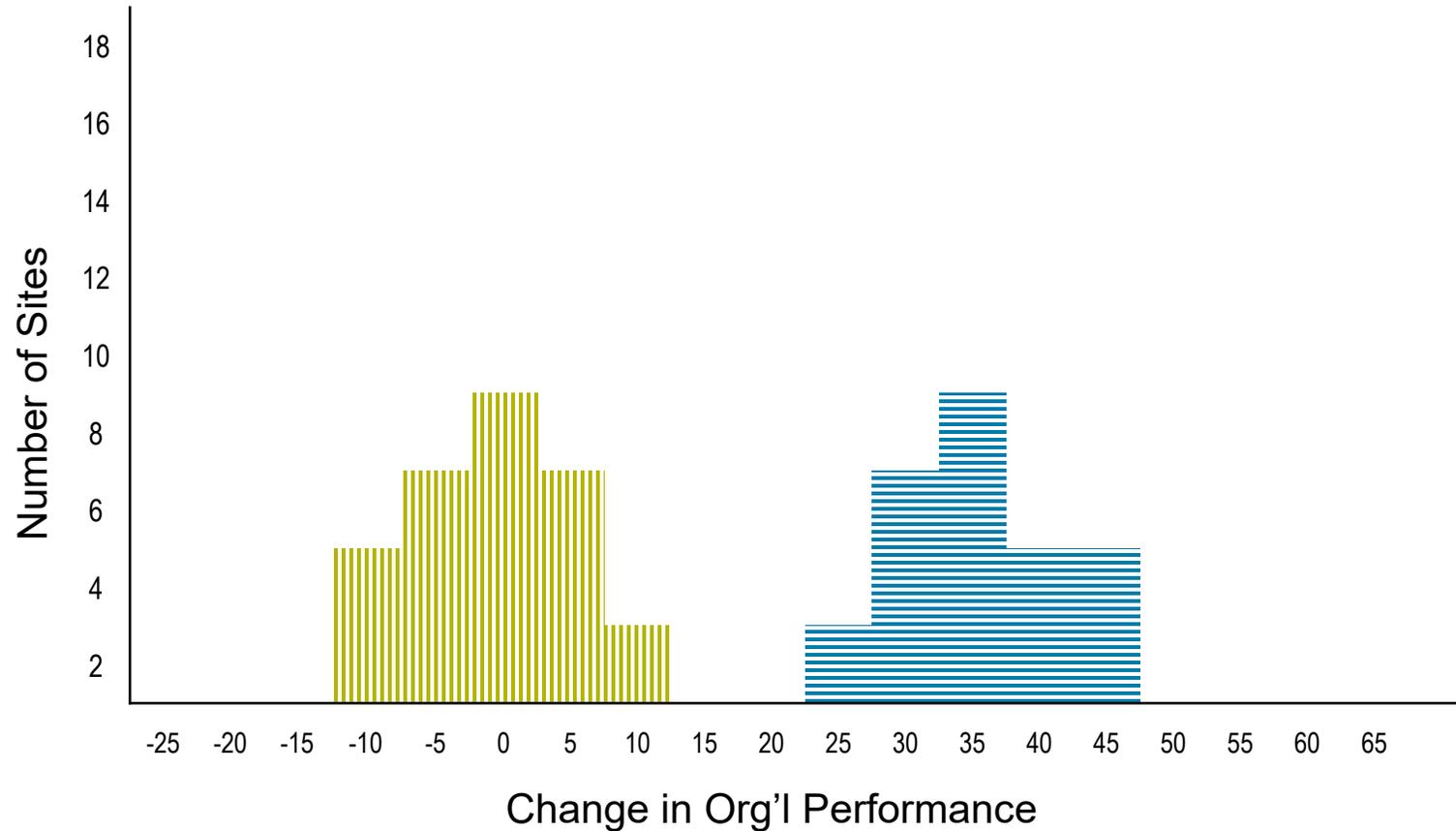
Key features of complex health interventions

- Multiple, interacting components
- Intervention targets multiple levels, entities
- Intervention is adaptable
- Intervention effects occur through multiple, mediated, moderated causal pathways

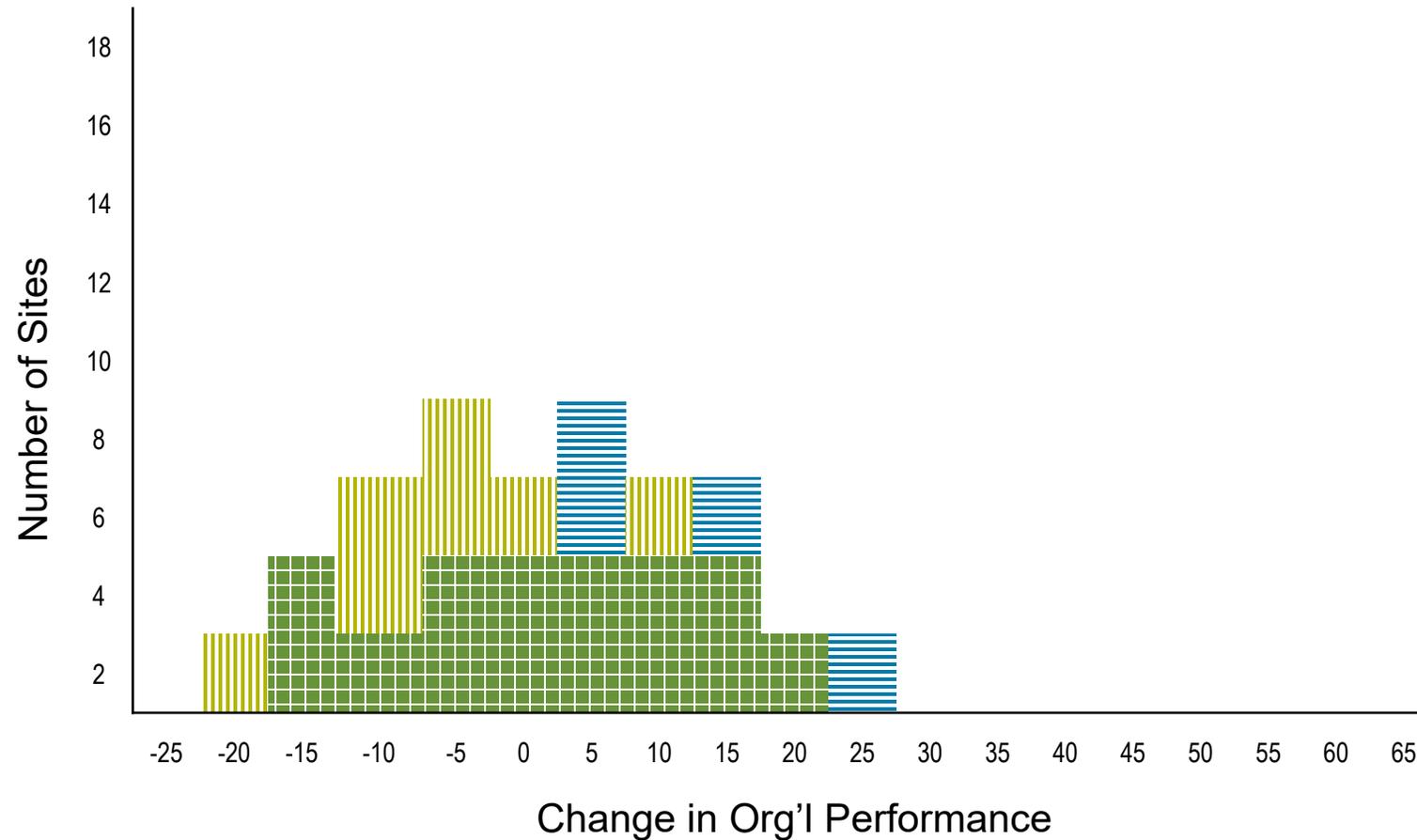
Craig et al, BMJ 2008;337:a1655.

Guise et al, JClInEpi 2017;97:6.

Org'l intervention trial results, scenario 1: *Strong effects, moderate variance*



Org'l intervention trial results, scenario 2: *Weak effects, high variance*



Support for policy/practice leaders: *evidence vs. insights and guidance*

- Support for dichotomous decisions, selection decisions (FDA and formulary, treatment):
 - *Is it effective? Does it work? Which is more effective?*
- Insights and guidance for practice:
 - *How does it work? Why? Where? When? For Whom?*
 - *How can we enhance its effectiveness?*
- **Impact focus vs. process focus (mediators, moderators, mechanisms, adaptation, managing context)**

Adapting (tailoring) complex health interventions

- Complex health interventions generally can be, will be – and should be – adapted
- Adaptation should be:
 - embraced, studied, and guided
rather than
 - ignored, suppressed

Studying mechanisms of effect

- De-emphasize average effects; prioritize study of mediators, moderators, mechanisms
- Embrace, study and guide adaptation; don't ignore or suppress
- Rethink “manualized interventions”
- Rethink “core components”; specify core functions and menu of forms



PCORI Methodology Standards for Studying Complex Health Interventions

SCI-1: Fully describe the intervention and comparator and define their core functions.

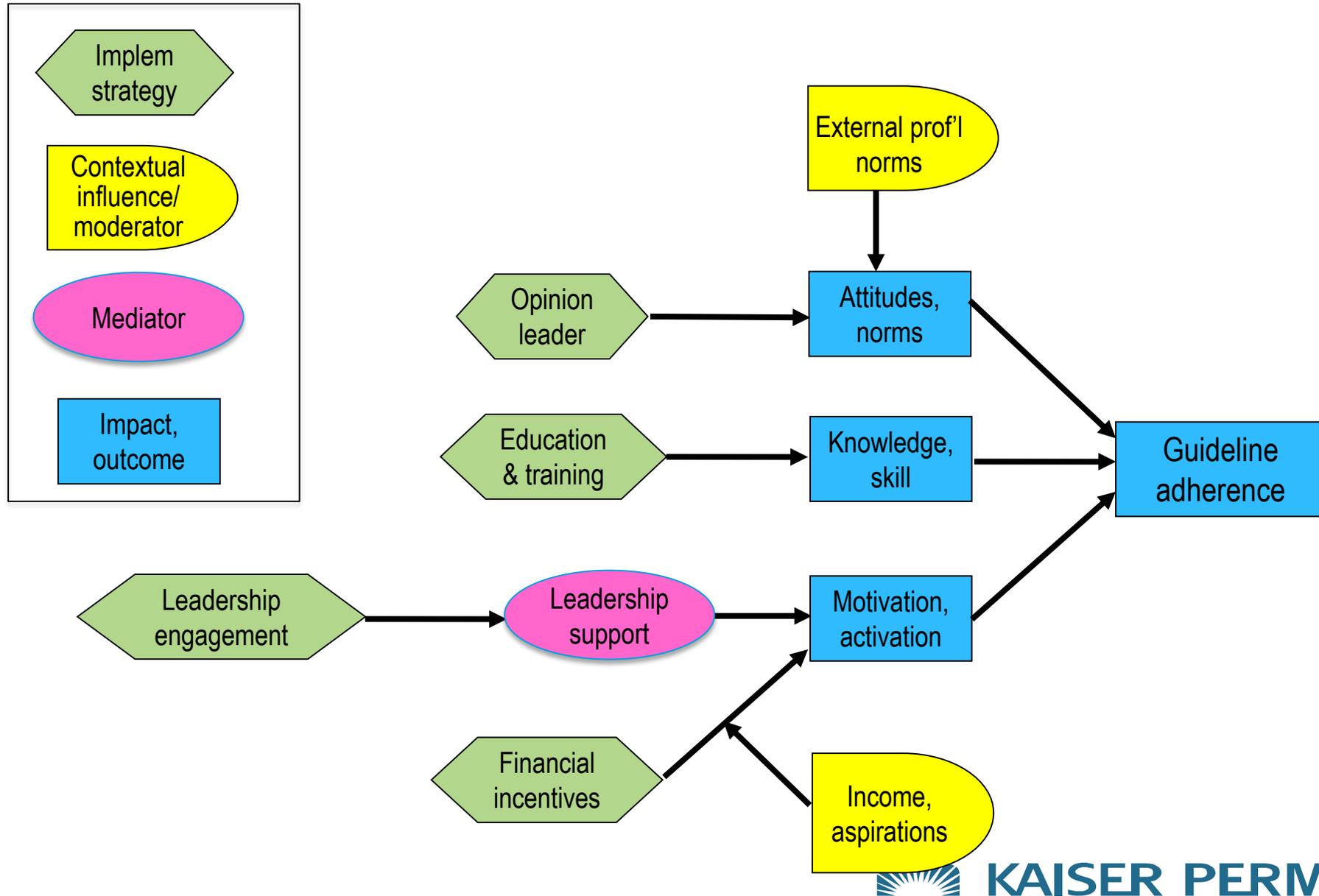
SCI-2: Specify the hypothesized causal pathways and their theoretical basis.

SCI-3: Specify how adaptations to the form of the intervention and comparator will be allowed and recorded.

SCI-4: Plan and describe a process evaluation.

SCI-5: Select patient outcomes informed by the causal pathway.

Contextual, mediator, moderator effects



Studying and guiding adaptation: form vs. function (vs. components)

- **Function:** purpose, intended effect(s); linked to needs
- **Form:** activity, format, operationalization

Hawe P, Shiell A, Riley T. Complex interventions: how "out of control" can a randomised controlled trial be? *BMJ*. 2004 Jun 26;328(7455):1561-3.

Hawe P. Lessons from complex interventions to improve health. *Ann Rev Public Health*. 2015 Mar 18;36:307-23.

Perez Jolles M, Lengnick-Hall R, Mittman BS. Core functions and forms of complex health interventions. *J Gen Intern Med*. 2019.

Form vs. function

- Physical activity forms: walking, running, swimming
- Patient education forms: printed materials, videos, nurse education, MD education, peer education
- Inpatient stay information transfer (care transitions interventions) forms: shared EHR, discharge summary, faxed/mailed/emailed/hand-carried letter
- Smoking cessation core functions: nicotine replacement, motivation, support

Selected implications of form vs. function

1. Questionable value of manualized interventions
(*as typically conceptualized, developed*)
2. Rethinking, replacing focus on “core components”
3. Alternative conceptualization, measurement of fidelity
(*to function rather than form*)
4. Questionable value of estimates of main effects;
rethinking the value and meaning of “evidence” and
“EBP” (*vs. insights, understanding, guidance*)
5. *Rethinking the purpose of research*

Studying complex health interventions: mediators, moderators, mechanisms

- Mediation analysis, structural equation modeling, other approaches to study mediators, moderators, mechanisms
- Qualitative comparative analysis (QCA)
- Process evaluation
- Theory-based evaluation, realistic/realist evaluation
- Approaches to adaptation

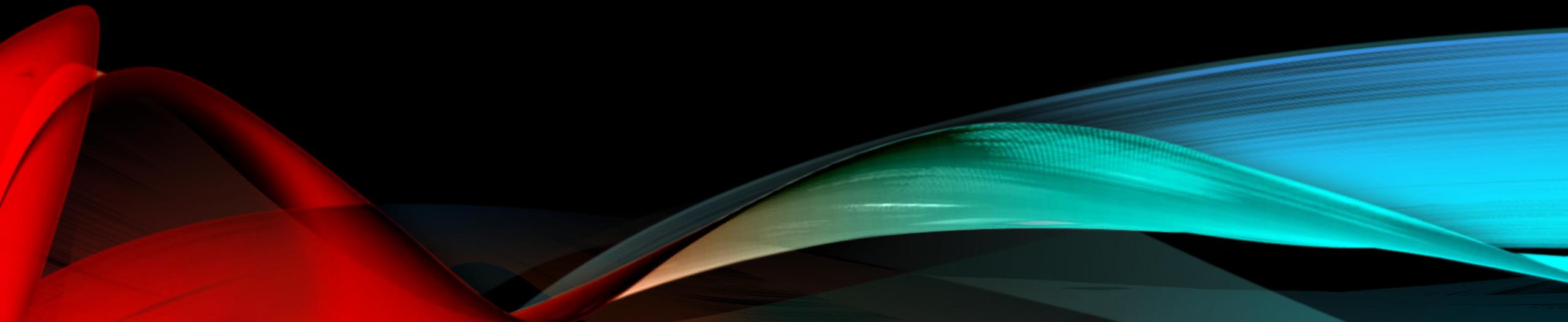
Studying and using complex health interventions

1. Identify, specify core functions, menu of forms
2. Produce evidence regarding form-setting/form-target relationships
3. Develop (and use) adaptation algorithms
4. Produce evidence regarding
 - **how** complex interventions achieve their effects (when, why, where)
 - how to **improve effectiveness** (adaptation, context modification) rather than
 - **whether** they are effective

LUNCH

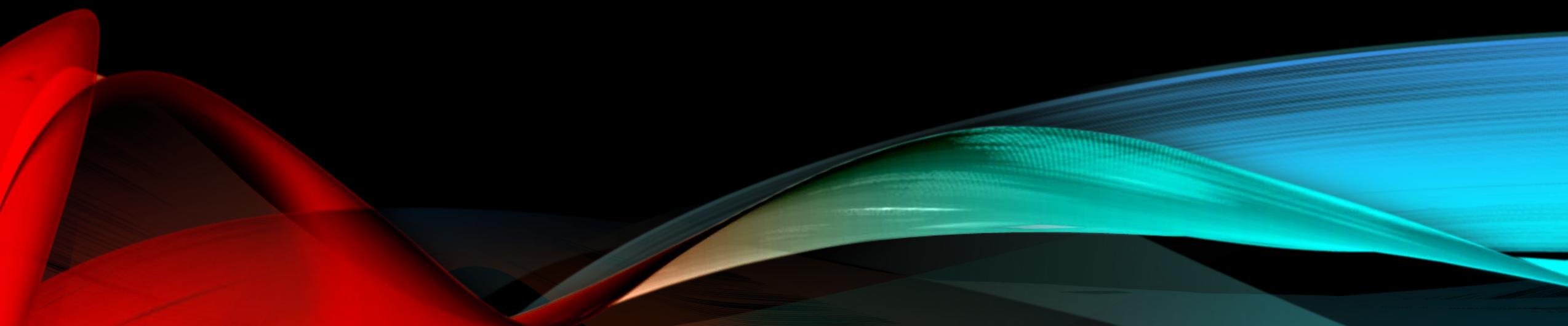
(ON YOUR OWN AT NCI CAFÉ)

11:45AM-12:30PM



SALLIE WEAVER, PH.D.

*Practical examples of connecting
organizational research to healthcare delivery*



Connecting organizational research to healthcare delivery: Some examples

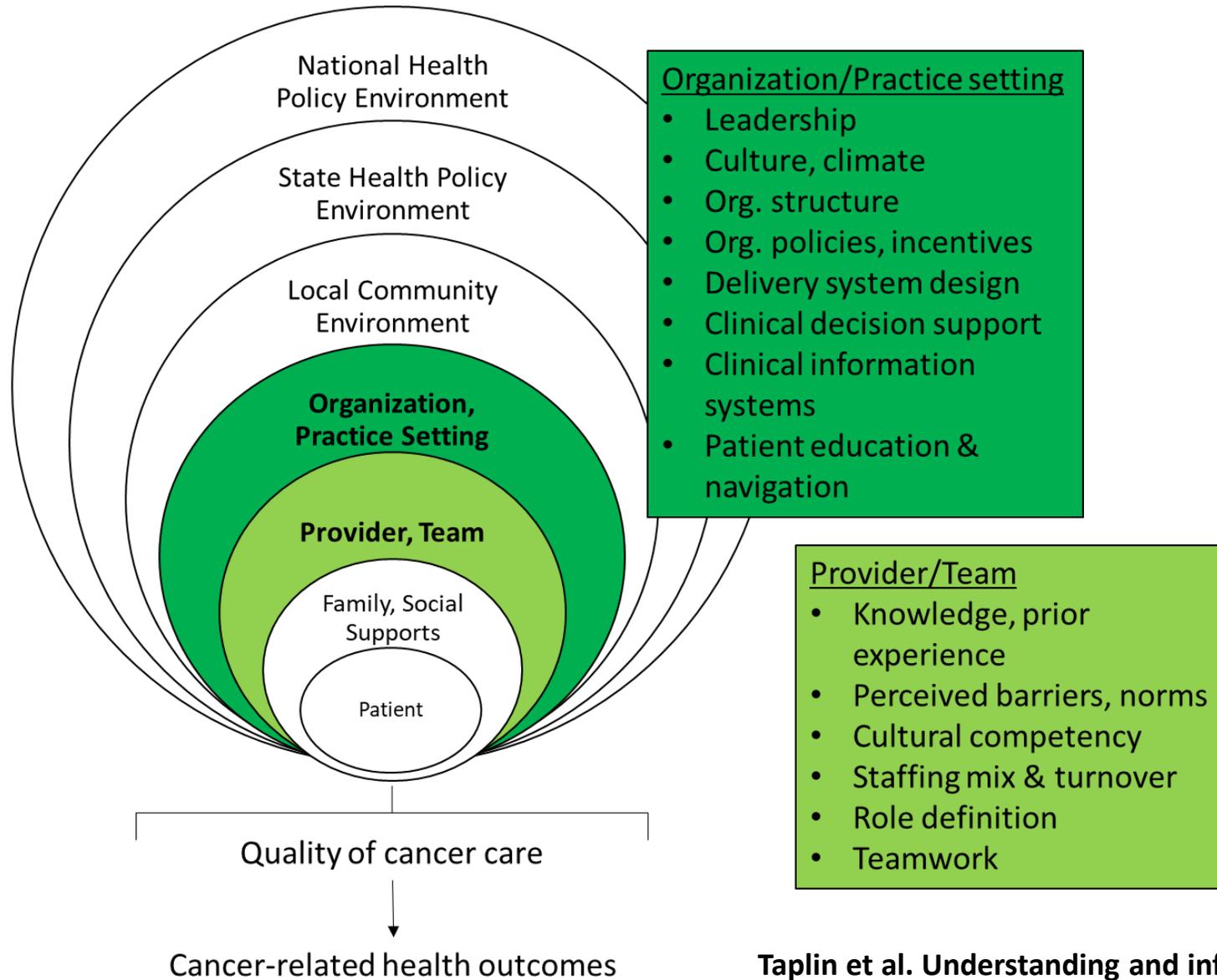
Sallie J. Weaver, PhD MHS

Health Systems & Interventions Research Branch

Healthcare Delivery Research Program

Div. Of Cancer Control & Population Sciences

Focus: Organizational & team characteristics



Taplin et al. Understanding and influencing multilevel factors across the cancer care continuum. *J Natl Cancer Inst Monogr.* 2012 (44): 2-10.

Organizational characteristics: An organizing heuristic

Organizational structure

- Size of org. unit
- Academic affiliation
- Service availability
- Configuration
- Staffing/skill mix
- Leadership structure/authority
- Financial structure
- Availability of services, equip, supplies
- Resource allocation
- Org. culture
- Work environment/org climate
- Knowledge, attitudes of managers, providers, staff
- Org. stressors/tensions

Organizational processes

- Care management processes
- Referral procedures
- Support for decision-making
- Incentive systems
- Communication & teamwork
- Relationships/roles& responsibilities
- Conflict management, problem solving
- Communication of and response to expectations

Organizational outcomes

- Process quality measures
- Intermediate outcome measures (e.g., glycemic control)
- Disease-related outcomes
- Global health status measures
- Utilization measures
- Workflow or efficiency measures
- Costs

Organizational safety climate & infection rates

ICU safety culture associated with central-line blood stream infection rates (CLABSI)

(Berenholtz et al., 2014 ICHE; Weaver et al., 2014, AJIC)



- CLABSI 57% ↑ in units with “conflicting” climate (Strong super. expectations, less hospital support)
- 77% ↑ in units with “nonpunitive” climate shape (Attempt blame free, less confidence in improv. action)

Safety culture modified effect of team-based quality improvement intervention on surgical site infection (SSI) rates

(Wick et al., under review)

- 25% reduction in all site SSI, 12-months post
- Colon SSI more challenging, 9% reduction on average
- Significant between hospital variation remained after controlling for size, type, location, etc.
- Something else going on?
- Yes! Hospitals where safety beliefs aligned with safety behavior more likely to reduce colorectal SSI rate post-implementation



Organizational factors & cancer screening

Price RA et al. Organizational factors and the cancer screening process. 2010. JNCI. REVIEW.

- Sparse data, mixed findings, structure—e.g., practice size, type—likely weak to modest predictors of screening
- Screening rates likely driven by strategies to:
 1. limit the number of interfaces across organizational boundaries (e.g., onsite, same day screening)
 2. recruit patients, promote referrals, and facilitate appointment scheduling
 3. promote continuous patient care

Organizational structures	Breast cancer screening	Cervical cancer screening	Colorectal cancer screening
Practice size			
Patient volume	(92,97)	(97) , (92)	(97,100)
Number of providers	(94,85) , (95)	(94) , (85)	(95)
Practice type			
Academic vs community-based private practices vs health maintenance organizations	(98)		
Integrated medical group vs independent practice association	(92)	(92)	
Multispecialty vs single specialty practice			(86)
Resources or facilities for screening	(97)	(97)	(81,97,100) , (86)
Nonphysician personnel to identify screening-eligible patients	(83)		
Staffing mix (ratio of generalists to specialists)	(97)	(97)	(97,100)
Organizational culture (perceived commitment to service quality)	(85)	(85)	

Organizational factors & cancer screening

Yano E et al. Primary care practice organization influences CRC screening performance. 2007. HSR

- Practice survey, 3 domains
 - Centralization, resources, complexity
- Guideline concordant screening more likely if practice had:
 - greater autonomy over the internal structure of care delivery (p<.04)
 - more clinical support arrangements (p<.03)
 - smaller size (p<.001)

Chou AF et al. Organizational factors affecting ...cancer screening among VA patients. 2015. Med Care

- Similar findings, expanded to breast, cervical, and CRC

Table 2: Organizational Characteristics of VA Primary Care Practices (n = 155)

<i>Organizational Characteristics</i>	<i>Percent</i>
<i>Practice centralization</i>	
Fully implemented service line or interdisciplinary division in primary care	58.0
Separate <i>budgetary control</i> for primary care program	31.0
Likelihood that <i>cost savings</i> achieved through primary care efficiencies could be <i>recaptured by the practice</i> (percent rated very-to-somewhat likely)	24.4
Primary care authority for practice staffing and human resource management issues*	
Recruiting and hiring primary care staff	51.0
Terminating primary care staff	51.0
Determining staffing arrangements (e.g., shifting staff, assigning staff duties)	65.8
Evaluating performance of primary care clinical staff	83.2
Evaluating performance of primary care administrative staff	72.9
Primary care authority or organizational influence outside of primary care*	
Obtaining primary care contract services (e.g., laboratory, community providers)	37.4
Establishing referral mechanisms (e.g., electronic notification, nurse case manager coordination)	53.5
Establishing procedures for obtaining specialty consult results in a timely manner	40.6
Obtaining additional resources for primary care quality improvement initiatives	36.1
<i>Practice resources</i>	
Sufficiency of <i>nonphysician staffing</i> in primary care (mostly-to-completely)	
Nurses (RNs, LVNs)	26.5
Administrators	40.0
Clerks and receptionists	25.2
Sufficiency of administrative and clinical space in primary care (usually-to-always)	
Administrative offices for clinical staff	40.6
Administrative offices for support personnel	43.2
Clinical space (e.g., number of examining rooms per provider)	27.1
Sufficiency of <i>clinical support arrangements</i> in primary care (usually-to-always)	
Personal computers or workstations	44.5
Appropriately equipped examining rooms	50.3
Appropriately equipped treatment rooms (e.g., sigmoidoscopy, podiatry, others)	54.2
Equipment for pelvic exams	42.6
Patient education space (e.g., classrooms, workstations, etc.)	34.8
<i>Practice complexity</i>	
HMO market penetration (percent of area population enrolled in HMO)	26.0
Academically affiliated primary care practices	64.5

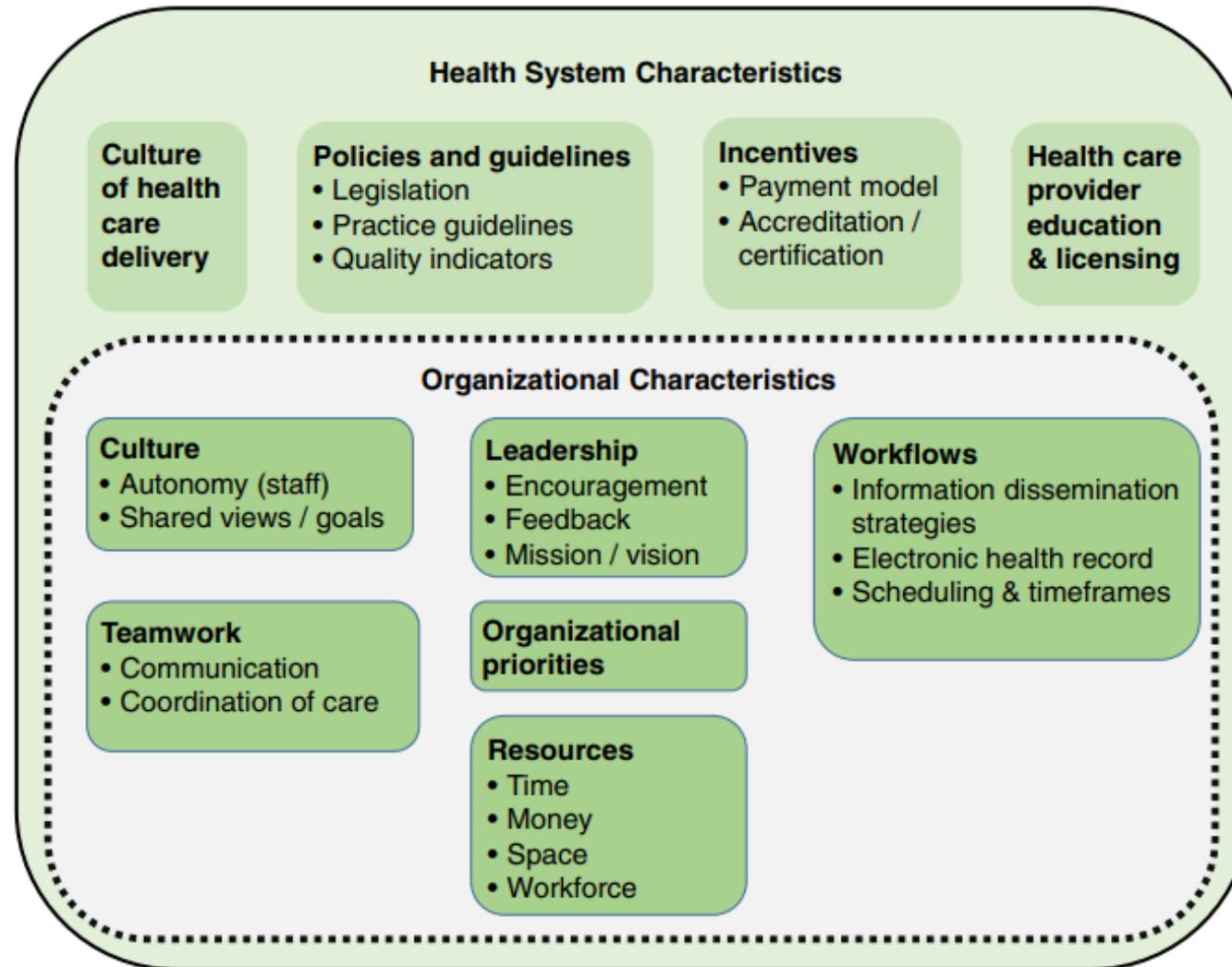
*Expressed as percent facilities rating good deal-to-complete authority over each function.

Organizational processes & screening interventions

Davis M et al. Key collaborative factors when Medicaid ACOs work with primary care clinics to improve CRC screening. 2019. Prev Chronic Dis.

- 16 Medicaid ACOs in Oregon
- Publicly reported data + key informant interviews
- Most common ACO interventions:
 - Reducing structural barriers (12 ACOs)
 - Provider assessment & feedback (11 ACOs)
 - Patient reminders (7 ACOs)
- Key factors in ACO-Clinic collaborations
 - Establishing relationships & building partnerships
 - Producing and sharing performance data
 - Developing process & infrastructure to support quality improvement
- Unintended consequences: Exclusion of smaller clinics, metric focus and fatigue

Organizational factors & shared decision making



Scholl I et al. Organizational and system-level characteristics that influence implementation of shared decision making...2018. Imp Sci. REVIEW

Organizational factors & palliative care

Whitney RL et al. ...rehospitalization among individuals with advanced cancer in year after diagnosis. 2017. J Onc Prac.

- Examined individual, hospital-level predictors of rehospitalization
 - >25K individuals with advanced breast, colorectal, NSCLC, pancreatic cancer, CA Cancer Registry
 - 71% hospitalized, 16% had 3 or more hospitalizations
- Rates significantly...
 - Lower after discharge from hospitals with outpatient palliative care program (IRR 0.90, CI: 0.83, 0.97)
 - Higher after discharge, for-profit hospitals (IRR 1.33, CI: 1.14,1.56)
- Rates not associated with: Hospital size, teaching status

Applying theory to care delivery research

Birken SA et al., Organizational theory for D&I research. 2017. Imp Sci.

- Qualitative, retrospective application of 4 organizational theories
- Explain how, why organization \leftrightarrow external environment interactions influenced adoption, implementation, an sustainability of SafeCare
- SafeCare: Program for preventing child maltreatment, 23 US states

Weaver SJ et al., Unpacking care coordination through a multiteam system lens. 2018. Med Care.

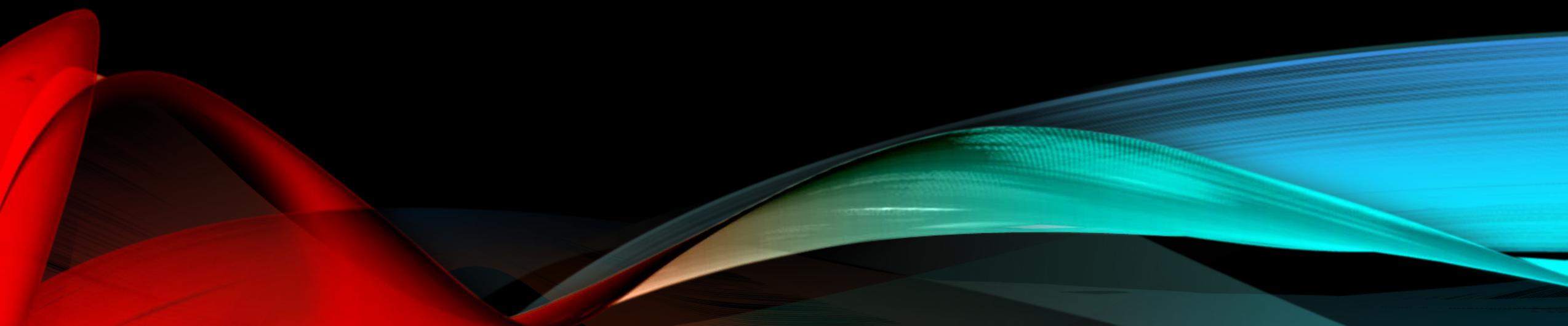
- Understanding care coordination via organizational theories of teamwork & coordination
- Okhysen & Bechky Organizational Coordination framework
 - Coordination = ongoing accomplishment, not static state or outcome
 - 5 coordination mechanisms
 - 3 integrating conditions (accountability, predictability, common understanding)

In closing

- Many examples of organizational variables in care delivery research
- Org. structure (size, academic affiliation) = easy to measure, but (often) weak association
- Opportunities to consider other organizational behavior variables beyond structure
- Theories of organizational or group behavior useful for
 - Conceptualizing, testing mechanisms of action (Mediators: why & how)
 - Understanding contexts in which a delivery intervention works best (Effect modifiers: when & in what kinds of delivery settings)

ELISABETH BEABER, PH.D.
AND
JASMIN TIRO, PH.D.

*PROSPR-2 experience
of developing organizational measures*



Understanding Organizational Factors across Healthcare Systems: A Messy Endeavor

Elisabeth Beaber, PhD, MPH

Fred Hutchinson Cancer Research Center

Jasmin Tiro, PhD

University of Texas Southwestern & Simmons Comprehensive Cancer Center



FRED HUTCH
CURES START HERE®

PROSPR

Population-based Research to Optimize the Screening Process

UT Southwestern
Harold C. Simmons
Comprehensive Cancer Center

**NCI
CCC**
A Comprehensive Cancer
Center Designated by the
National Cancer Institute

Take home messages

1. Cross-organization comparisons require common definitions and units of analysis
2. Narrowing the scope of organizational measures can increase feasibility (and collaborations)
3. Changes over time are important, but challenging to measure

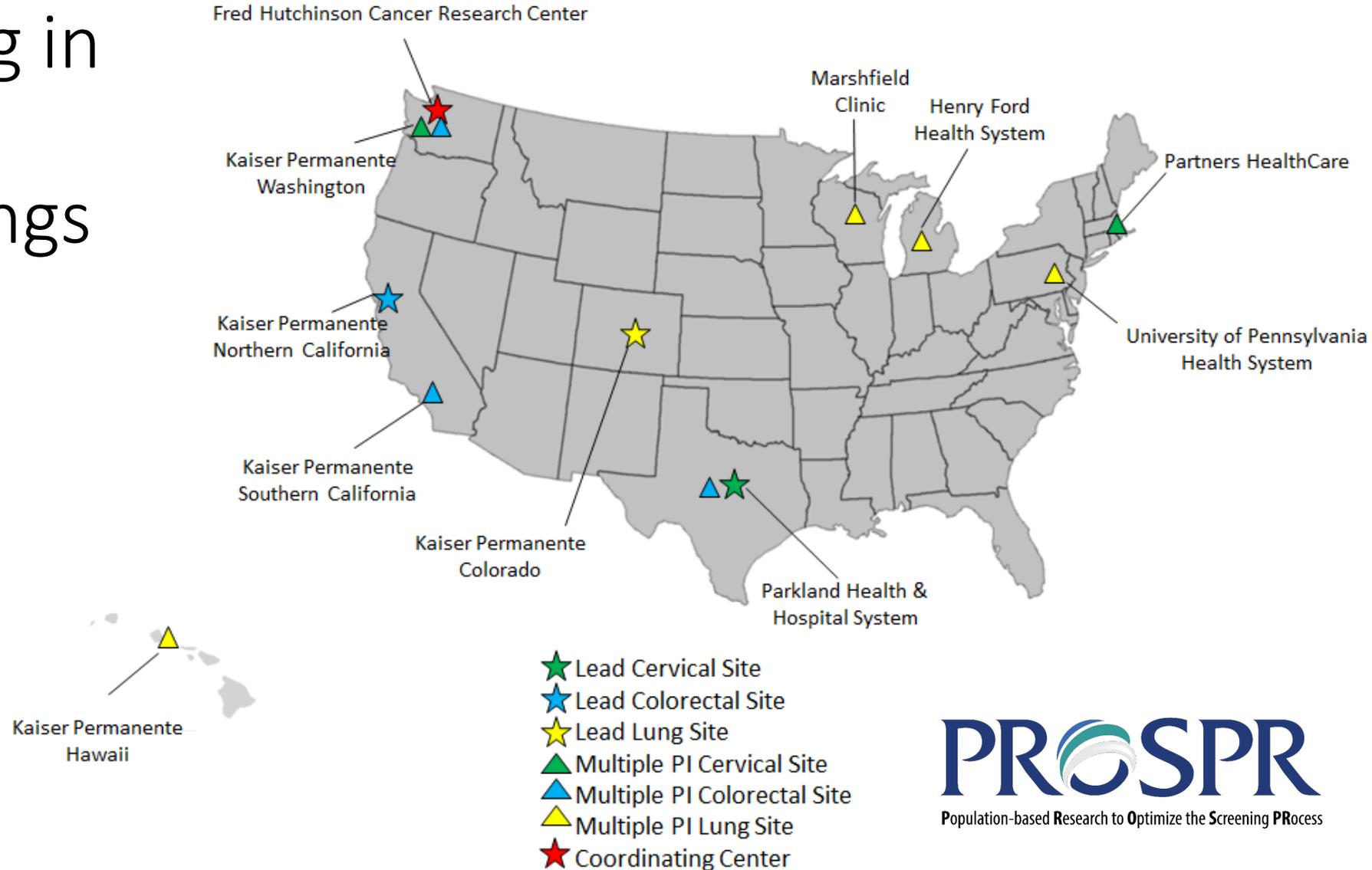


PROSPR studies cancer screening in community healthcare settings

Individuals	3.7+ million
Healthcare organizations	10
Years of data	2010-forward

Healthcare Settings

Managed care
Mixed-model
Primary care network
Integrated safety-net



Community healthcare organizations are diverse

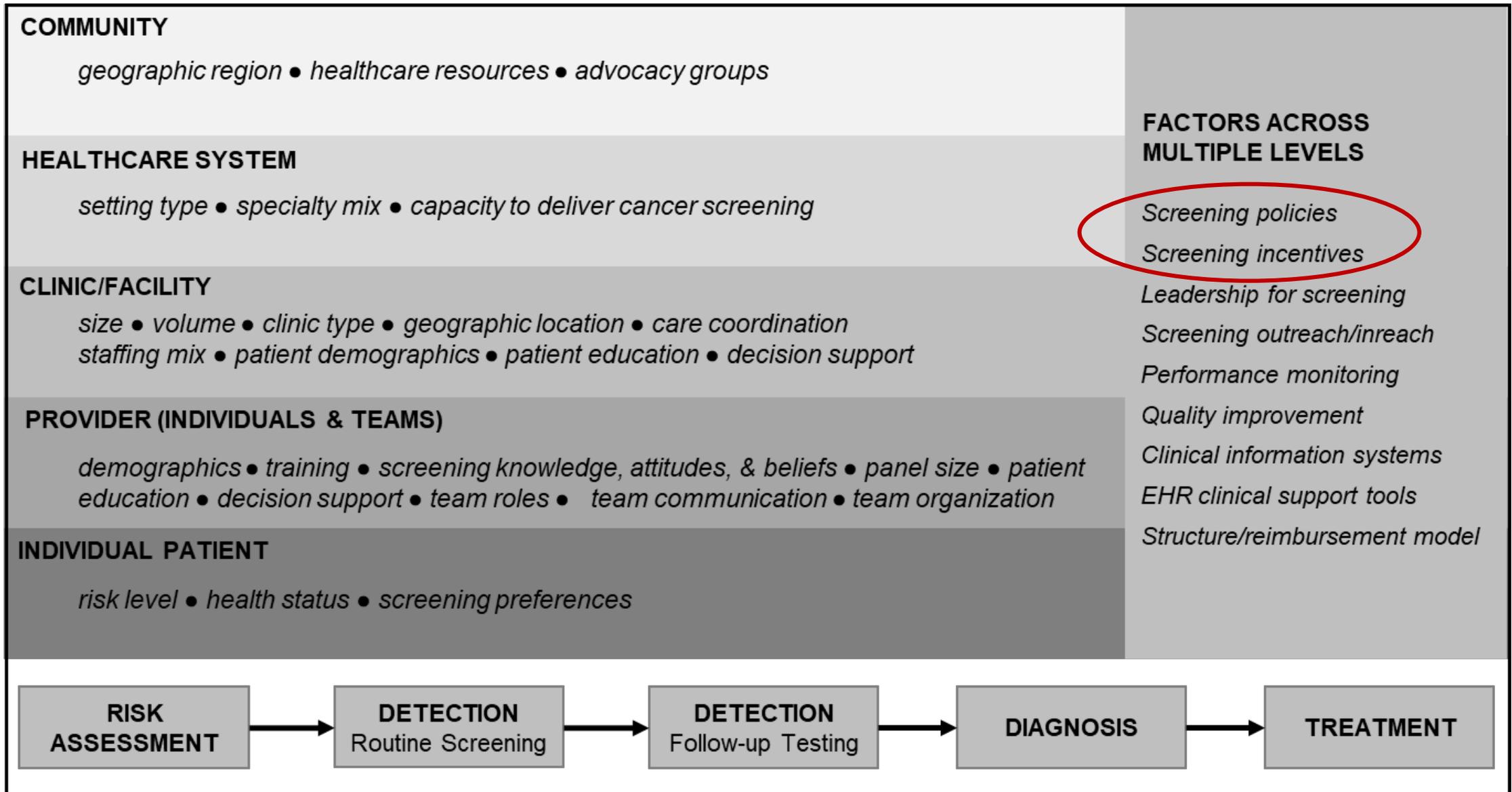
Healthcare organization definition:

- Facilities and provider teams connected through common ownership or joint management to deliver healthcare
- Organizations may have different structures, resources (e.g., centralized departments for IT, quality improvement, population health), protocols, and climate/culture

Healthcare Settings
Managed care
Mixed-model
Primary care network
Integrated safety-net



Multilevel Factors and the Cancer Screening Process

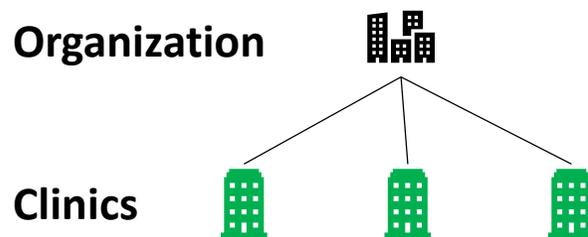


Can organizational factors be measured in a comparable way across diverse organizations?

Example: Policies, incentives, & roles to deliver cancer screening

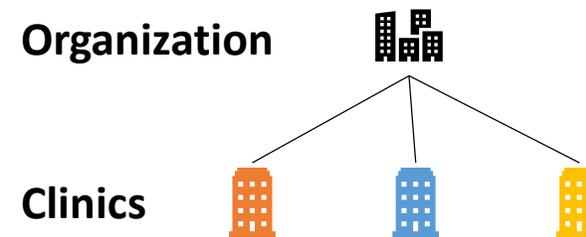
Organization A

- Organization-wide screening policies and incentive programs that apply to all clinics
- Population health management department implements policies and programs



Organization B

- Each clinic determines screening policies and incentive programs
- Some clinics may have a champion, but it is not a clear role within clinics



What is the appropriate unit of analysis to compare these organizations?

Common definitions & comparisons are important

The 10 PROSPR organizations did **NOT** have pre-determined common research goals about:
which organizational factors should be measured
and
how to measure them

In contrast, ***prospectively designed*** studies can intentionally select organizations with similar structures and goals

PROSPR's approach: Focus on factors specific to the cancer screening process

- Narrowed scope to include domains that could be answered by key stakeholders
- Limited scope increased feasibility and ability for healthcare organizations to participate
- Organizational domains will be linked to pre-defined quality measures across cancer types (lung, cervical, colorectal)

Organizational domains

1. Organizational structure
2. Clinical data infrastructure
3. Cancer screening policies
4. Incentive programs related to cancer screening

5. Quality improvement
6. Culture/climate related to preventive care delivery



Collect data via a key stakeholder informal structured interview (or written survey) at each PROSPR organization

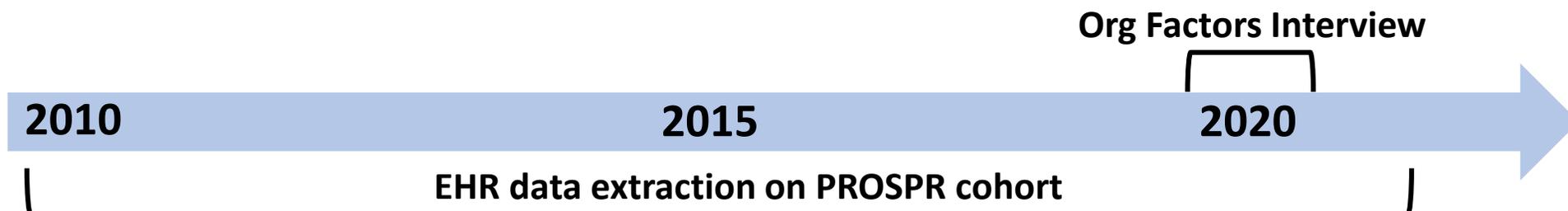


Did not pursue

**PROSPR Organizational
Factors Interview
launches in 2020 across
10 healthcare
organizations!**

Healthcare organizations are **constantly** evolving...making measurement challenging

- Healthcare org structure, priorities, staffing, policies, and incentives are constantly in flux
- Linking to cancer screening-related outcomes requires retrospective data collection
- Burden of primary data collection to characterize organizations increases when trying to measure changes over time



Additional issues...

how can researchers:

1. Align research goals with what healthcare organizations value (stakeholder engagement)?
2. Be more attuned to incentives and regulations (context) that drive decision-making by organizational leaders?
3. Account how (or how much) healthcare providers and teams affect variability in health outcomes?

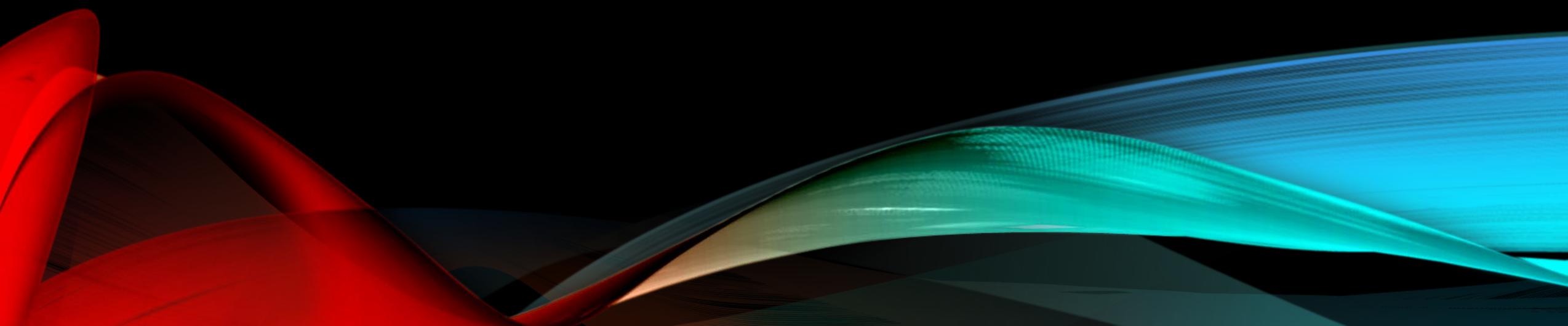
Stay tuned for next talk...

Take home messages

1. Cross-organization comparisons require common definitions and units of analysis
2. Narrowing the scope of organizational measures can increase feasibility (and collaborations)
3. Changes over time are important, but challenging to measure

JENNIFER HAAS, M.D.

*Care coordination and tension between
primary care and specialty groups*



Harnessing Complimentary Forces in Care: Primary & Specialty Perspectives

National Cancer Institute
October 2019

Jennifer Haas, M.D., M.Sc.
Peter L. Gross MD Chair in Primary Care
Director of Research and Research Education
Massachusetts General Hospital

Disclosures

- I am a primary care physician.

Increasingly, one size doesn't fit all



Shared Goal, Different Perspectives



Varied Perspectives Can Lead to a Different “World View”

Breast Cancer Surveillance Consortium Risk Calculator

<https://tools.bcsc-scc.org/BC5yearRisk/intro.htm>

Risk Calculator

1. Does the woman have a history of breast cancer or of [ductal carcinoma in situ \(DCIS\)](#) or [lobular carcinoma in situ \(LCIS\)](#) or [atypical ductal hyperplasia \(ADH\)](#) or breast augmentation?
2. What is the woman's age?
3. What is the woman's race/ethnicity?
4. Have any of the woman's first-degree relatives (mother, sister or daughter) been diagnosed with breast cancer?
5. Has the woman had prior breast [biopsies](#) (positive or negative)?
6. What is the woman's BI-RADS® [breast density](#) (radiologic assessment of the density of breast tissue by radiologists who interpret mammograms)?

* You can click a question number for a brief explanation of the risk factor.

Calculate Risk

Untitled - IBIS Risk Evaluator

IBIS Risk Evaluator (Tyler Cuzick)

File Edit View Tools Help

Factor Form

Personal factors

Woman's age: Menarche: Height: Weight: Measurements:

Nulliparous: Parous: Unknown: Age First Child: No benign disease: Hyperplasia (not atypia): Unknown benign disease: Atypical hyperplasia: LCIS: Premenopausal: Perimenopausal: Postmenopausal: No information: Age at menopause: Ovarian cancer:

Mother: Ovarian: Bilateral: Breast cancer: Age: Sisters: Ovarian: Bilateral: Breast cancer: Age: Ashkenazi inheritance:

Paternal Gran: Ovarian: Breast cancer: Age: Maternal Gran: Ovarian: Breast cancer: Age: Show start up screen

Paternal aunts: Ovarian: Breast cancer: Age: Maternal aunts: Ovarian: Breast cancer: Age: Daughters: Ovarian: Breast cancer: Age:

Male relatives: Half Sisters: Affected cousins: Affected Nieces: Genetic Testing:

Family History Diagram:

Calculate Risk

Competing mortality: Risk Options:

HRT use Length of use (years): Never: 5 or more years ago: Less than 5 years ago: Current user:

View Family History

Complexity Brings Shared Implementation Challenges

Figure 1. Summary of Risk-based Clinical Action Thresholds

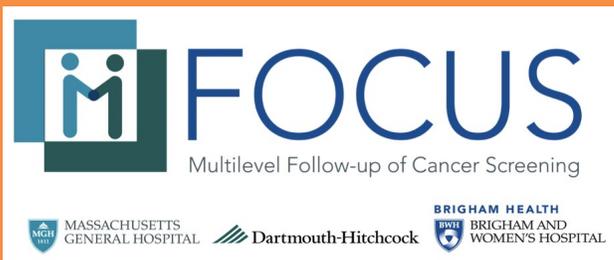
	Surveillance		Colposcopy	Treatment		
CIN3+ risk	Return in 5 years equivalent to general population with one negative HPV or co-test	Return in 3 years similar to a negative screening cervical cytology	Return in 1 year between colposcopy and 3-year return thresholds	Colposcopy Approximate risk of low-grade to moderately abnormal results in a screening population (e.g. LSIL)	Colposcopy or Treatment Approximate risk of moderate to high risk results in a screening population (e.g. ASC-H)	Treatment preferred* Very high risk results (e.g. HSIL/HPV 16+) <i>*treatment without biopsy, see-and-treat</i>
	≤0.1% at 5 years	0.2% -0.5% at 5 years	0.6% at 5 years to <4% immediate risk	4%-24% immediate	25%-49% immediate	≥50% immediate

ASCCP 2019

Improving Follow-up of Abnormal Cancer Screening Tests in Primary Care Practices

- Benefits of cancer screening requires timely and appropriate follow-up of abnormal results
- Evidence suggests inadequate and variable rates of follow-up across
 - Different cancer tests
 - Clinic settings
 - Patient characteristics
- Poor PCP/ specialist coordination

Cancer	Abnormal Result	Diagnostic Step	Current F/u Rate
Breast	BIRAD 3	Mammogram, DBT, US in 6 months	50-80%
CRC	FOBT/FIT +	Colonoscopy in 3 months	33-48%
	Adenoma	Colonoscopy in 5 years	45%
Cervical	ASCUS HPV-	Repeat Pap & HPV in 12 months	15-40%
	LSIL, HSIL, ASC-H, any HPV+ 16/18	Colposcopy +/- biopsy in 3 months	50-75%
Lung	L-RAD 3	LDCT in 6 months	55%



Funding Support: NCI U01 CA225451

Study Goal: Improve Follow-up of Abnormal Cancer Screening Results

- Comprehensive, population management system for abnormal test result tracking and follow-up for breast, cervical, colorectal, lung screening abnormalities
- Designed as “fail-safe” program to supplement current care
- Primary care “centric” with specialty support
- Visit-based EHR support and non-visit based, population outreach



Study Overview

- Randomized, 4-arm trial of 40 practices in Massachusetts General, Brigham and Women's and Dartmouth primary care networks
- Key study components include:
 - IT enhancements: to identify and track overdue patients
 - Individual patient and provider support: patient and provider EHR reminders
 - Team-level support: administrative outreach and patient navigation
- Primary outcome: completion of follow-up care within 120 days of study eligibility
 - Determined by the due date of the specific abnormal screening result

Practices Randomly Assigned to 1 of 4 Arms			
Arm 1	Arm 2	Arm 3	Arm 4
<i>Standard Care</i>	Visit Based Reminders	Visit Based Reminders	Visit Based Reminders
		Population Health Management	Population Health Management
			Patient Navigation



Challenges to Care Coordination

- Increasingly complex information
- Different population perspectives
- Lack tools for shared decision-making
- Competing demands
- Lack of role clarity/ shared vision
- Limited systems to support implementation

JILL MARSTELLER, PH.D.

*Practical application of interventions designed
to influence organizational leadership*



PRACTICAL APPLICATION OF INTERVENTIONS DESIGNED TO INFLUENCE ORGANIZATIONAL LEADERSHIP

JILL A. MARSTELLER, PHD, MPP

OCTOBER 15, 2019

OBJECTIVE

- Describe methods to target change in an entire organization or in more than one organization with a focus on leadership

AGENDA

- Tested
 - Executive Walk-Rounds
 - Simulation
- Underway
 - Lean Leadership Program
 - Health Equity Learning Network

EXECUTIVE WALK ROUNDS

- Intervention engages organizational leadership directly with front-line care providers
- Executives or senior leaders visit front-line patient care areas
 - Observe and discuss current or potential threats/ problems
 - Provide support to front-line staff in addressing threats
 - Show leadership commitment to safety, foster trust and psychological safety
- Operationalized in varied ways, making comparison across studies difficult
- Mixed evidence, although all found improved staff perceptions of safety

Weaver et al., 2013

LEADERSHIP SIMULATION TRAINING

- New CEO must save hospital with failing safety record
- 55 senior health care leaders in 8 teams, 4-hour session
- Practiced skills in 3 areas:
 - analyzing the impact of direct and delegated executive involvement in patient safety initiatives
 - developing accountability structures and processes related to patient safety across levels of an organization, and
 - identifying and prioritizing patient safety improvement goals
- No 2 teams developed same strategy, all had gaps at various levels of the organization;
Participants satisfied overall

Rosen et al., 2015

LEAN LEADERSHIP PROGRAM AT JHH

Lean Management is defined as “the practices and tools used to monitor, measure, and sustain the operation of Lean production operations” (Mann 2005, Creating a Lean Culture, pg. 265)

LEAN MANAGEMENT

- Lean Management is composed of the following core elements:
 - **Standard work** for leaders – structure and routine for spending time in the workplace with a process focus to achieve targets.
 - **Visual controls** – methods for making process performance visible in the workplace, comparing actual performance to target performance.
 - **Daily accountability process** – daily meetings to identify variance in process performance, identify what improvements are needed, and create action plans to achieve improvements.
 - **Discipline** – to develop daily habits applying the 3 core elements above

Mann 2005, Creating a Lean Culture, pg. 265.

LEAN LEADERSHIP PROGRAM

Setting

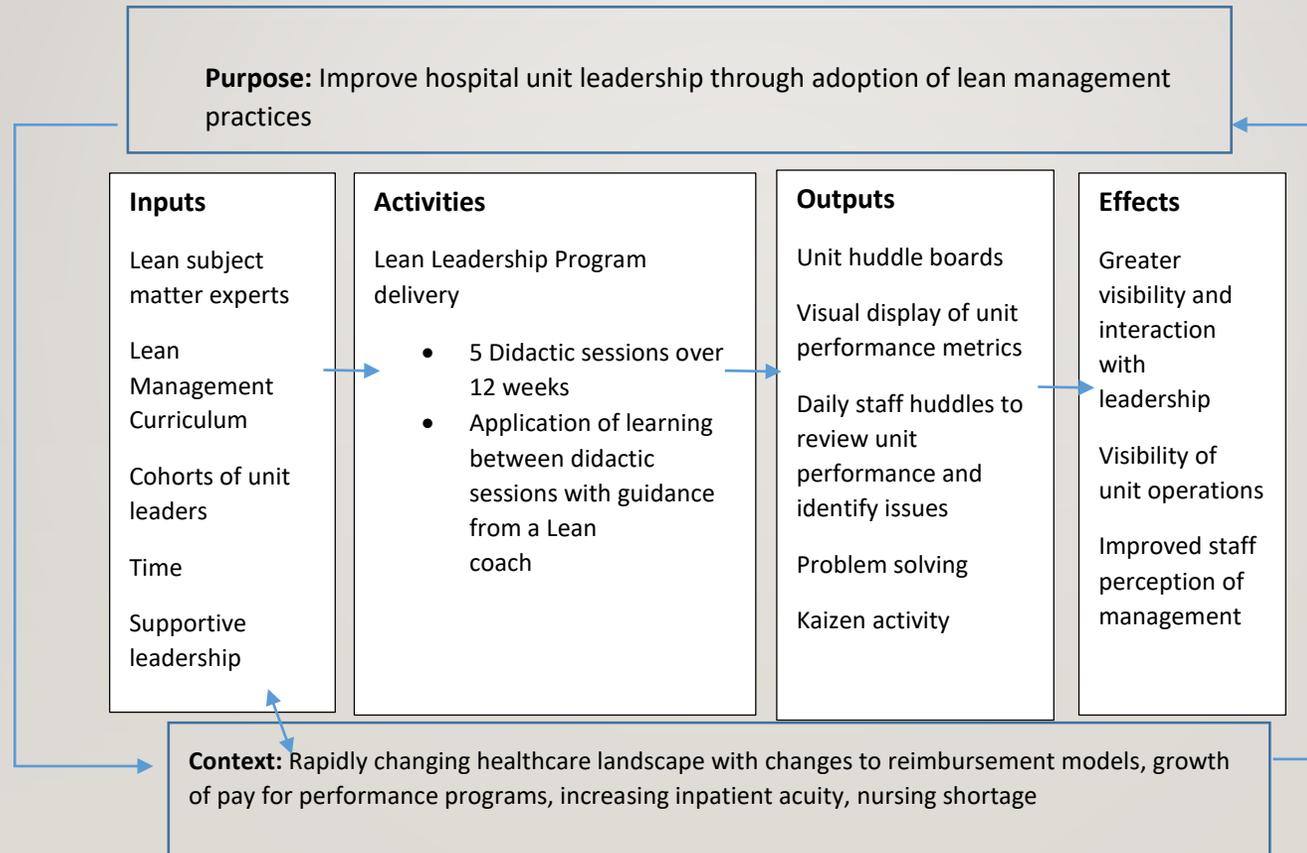
- Johns Hopkins Bayview Medical Center
- 440+ bed Academic hospital
- Located in East Baltimore
- Part of Johns Hopkins Health System

Intervention

- 12 week cohort program
- Didactic sessions alternating with applied experiential learning every other week on the unit with a Lean expert coach.

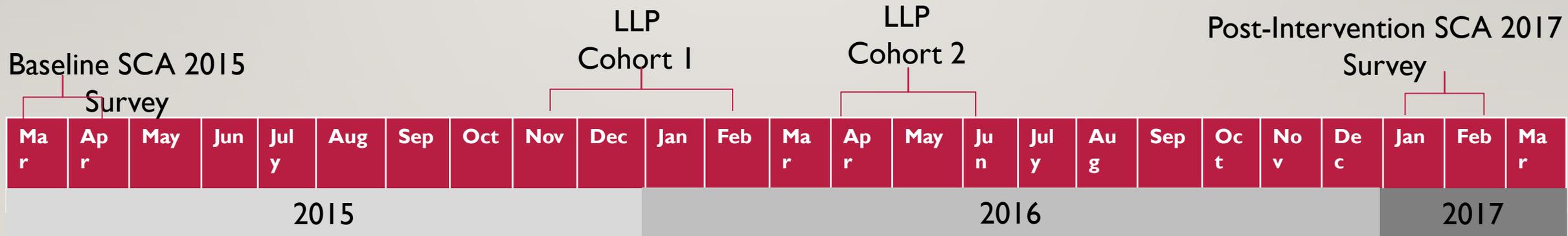


LOGIC MODEL



LEAN LEADERSHIP PROGRAM INTERVENTION UNITS

Lean Leadership Program Cohort 1 Nov. 2015 – Feb 2016	Lean Leadership Program Cohort 2 April 2016 – June 2016
Emergency Department	Medical Intensive Care Unit (MICU)
Medicine B (Med B)	Medicine A (Med A)



FINDINGS TO DATE

- No difference in difference effects in perceptions of management
- Seeing benefit at JHH with use of the unit level huddle board to achieve some HRO principles and to promote second-order problem solving (closing the loop on issues)
- Program needs further testing and evaluation through experimental design
- Current efforts to develop a survey to assess Lean Management at organizational, group, and individual levels

HEALTH EQUITY LEARNING NETWORK

System-level leaders
of primary care
systems come
together by webinar/
teleconference for
didactic sessions,
interactive
discussions and team-
wide coaching

DEVELOPED FROM CURRICULUM FOR A QUALITY LEADERSHIP WORKSHOP (TWO 2-HOUR SESSIONS)

Session	Topics
Session 1	Change management, quality improvement skills, and translating evidence into practice (TRiP)
Session 2	Psychological safety, divergent and convergent thought, and situational leadership
Session 3	Conditions of team leadership
Session 4	What leaders need to provide to enable continuous quality improvement: time, resources, presence, accessibility, discussion, role modeling, accountability, and structure

Plus

All leaders in one room and bringing examples to entire group

Lead questionnaire was interesting & helpful in the discussion

Conversation on divergent & convergent thinking helpful

Leadership style approach was helpful

Exercises

Good topics

Real examples provided

Multidisciplinary; multi-levels of leadership

Group warmed up and became more relaxed and open as the session went

Delta

Engage leaders on top of hierarchy (e.g. attending MD's)

Discuss the value/vision of each leadership level, do they align?

Could discuss individual results from lead questionnaire

Might need to think about how to conduct this for different levels of leaders [new vs. experienced leaders]

Start w/ purpose of meeting/session

For the future, would recommend this 'training' when project/initiative begins. So that everyone working from same info

All levels of leadership should be present

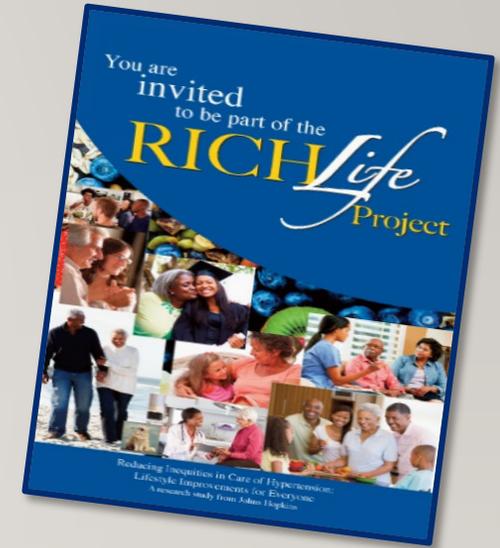
Set the stage - why are we here? What are the objectives? Do this early

Frame as - we're here to give you tools for leadership

RICHLIFE STUDY OVERVIEW



- **Design:** Cluster randomized trial
- **Setting:** 30 practices in Maryland and Pennsylvania
- **Participants:** 1,890 patients (63 per site)
 - Must have uncontrolled hypertension plus at least one other condition: diabetes, depression, high cholesterol, heart disease, or tobacco smoking
- **Interventions:**
 - Standard of care plus (SCP)
 - Collaborative Care/Stepped Care (CC/Stepped Care)
- **Main outcomes at 12 and 24 months** (subgroup analyses: race and ethnicity)
 - *Biomedical:* BP control (<140/90 mm Hg) and average systolic BP
 - *Patient reported:* Patient activation; health related quality of life, chronic disease self-management behaviors; attainment of goals; and experiences of care



SYSTEM-LEVEL LEADERSHIP INTERVENTION

Health Equity Leadership Network (HELN) Workshops:

Quarterly face to face or web-based sessions featuring brief didactic presentation and interactive exercises and discussions

Coaching Calls

Held in months when there is not a HELN Session, members of teams in intensive arm sites are invited to discuss the previous HELN session topic, dashboard related topics, and their own questions and issues with the leaders of their healthcare system present and willing to help manage

BEST PRACTICES IN HEALTHCARE EQUITY

1. Recognize disparities and commit to reducing them
2. Implement a basic quality improvement structure and process
3. Make equity an integral component of quality improvement efforts
4. Design evidenced-based intervention(s) informed by trans-disciplinary and community-engaged research
5. Implement, evaluate, and adjust the intervention(s)
6. Sustain the intervention(s)



HEALTH EQUITY LEADERSHIP NETWORK (HELN) SESSIONS:

Module 1: Deciphering Health Disparities and Equity

- Key Understanding of Health Disparities & Health Equity
- Engaging the Community to Advance Health Equity
- Equity, Safety, and Quality Monitoring & Using the RICH LIFE Dashboard
- 2017 ACC/AHA Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults
- Practical Strategies to Address Health Disparities & Health Equity

Module 2: Principal Topics in Leadership to Enable Health Equity

- Situational Leadership
- Speaking Up: Psychological safety
- The Effective Team: Conditions of Team Leadership
- Effective Communication and Teamwork
- Organizing for High Reliability & Equity
- The Art of Sustaining Leadership Efforts

Module 3: Activating your role as a Systems-Level Leader

- Sustainability of Public Health Interventions
- Advocacy for Change

Module 4: Shaping the Future – Health Equity for All

- Integrating Health Equity in the Culture of Health



REFERENCES

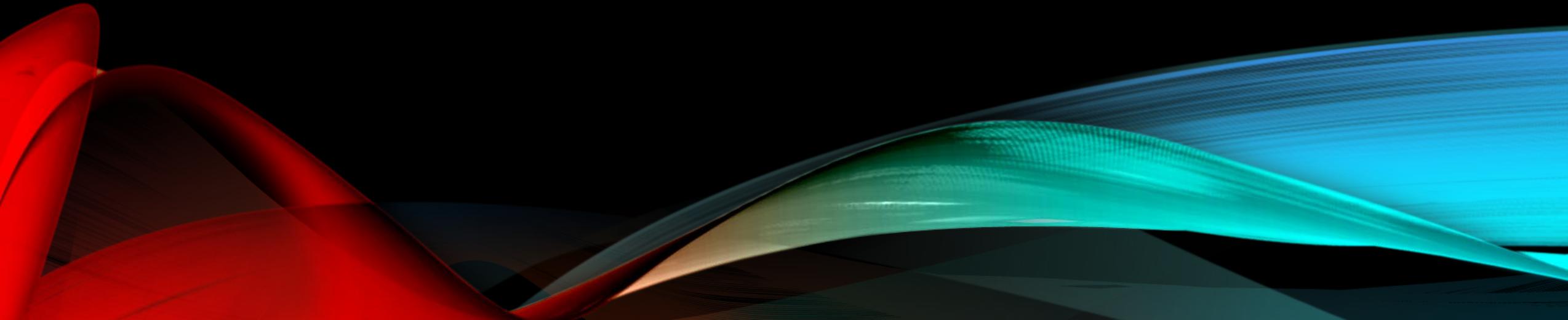
- [Rosen MA](#)¹, [Goeschel CA](#), [Che XX](#), [Fawole JO](#), [Rees D](#), [Curran R](#), [Gelinas L](#), [Martin JN](#), [Kosel KC](#), [Pronovost PJ](#), [Weaver SJ](#). **Simulation in the Executive Suite: Lessons Learned for Building Patient Safety Leadership.** [Simul Healthc](#). 2015 Dec;10(6):372-377.
- [Aboumatar HJ](#)^{1,2}, [Weaver SJ](#)^{2,3}, [Rees D](#)³, [Rosen MA](#)^{2,3}, [Sawyer MD](#)^{2,4}, [Pronovost PJ](#)^{2,3}. **Towards high-reliability organising in healthcare: a strategy for building organisational capacity.** [BMJ Qual Saf](#). 2017 Aug;26(8):663-670. doi: 10.1136/bmjqs-2016-006240. Epub 2017 May 25.
- [Weaver SJ](#)¹, [Lubomksi LH](#), [Wilson RF](#), [Pfoh ER](#), [Martinez KA](#), [Dy SM](#). **Promoting a culture of safety as a patient safety strategy: a systematic review.** [Ann Intern Med](#). 2013 Mar 5;158(5 Pt 2):369-74. doi: 10.7326/0003-4819-158-5-201303051-00002.
- Chin MH, et al. 2012. A Roadmap and Best Practices for Organizations to Reduce Racial and Ethnic Disparities in Health Care. JGIM August 2012, Volume 27, Issue 8, pp 992-1000

BREAKOUT ROOM INFORMATION

1	Organizational theory	Sylvia Hysong, Ph.D. Sallie Weaver, Ph.D. Sarah Birken, Ph.D.	2W 032/034
2	Organizational intervention design	Gregory Aarons, Ph.D. Jasmin Tiro, Ph.D.	110
3	Organizational measures	Jose Escarce, M.D., Ph.D. Bryan Weiner, Ph.D.	2E 908
4	Evaluation of organizations	Brian Mittman, Ph.D. Jill Marsteller, Ph.D.	7E 032/034

AFTERNOON BREAK

3:15-3:30PM



REPORT OUT FROM BREAKOUT GROUPS

- 1 Organizational theory
- 2 Organizational intervention design
- 3 Organizational measures
- 4 Evaluation of organizations

EXPERT REFLECTIONS

Greg Arons, Ph.D.

Jose Escarce, M.D., Ph.D.

Sylvia Hysong, Ph.D.

Jill Marsteller, Ph.D.

Brian Mittman, Ph.D.

Bryan Weiner, Ph.D.



WRAP-UP

What can NCI do in the future to support organizational research in healthcare?

WHAT IS NCI DOING?

- Multilevel Training Institute (MLTI)
- *Networks*
 - PROSPR (Population-based Research to Optimize the Screening Process)
 - ACCSIS (Accelerating CRC Screening and Follow-up through Implementation Science)
 - Inherited Cancer Syndromes (Case ascertainment & appropriate follow-up care)
 - Follow-up to Abnormal Screening
- *AHRQ*
 - Evidence review of the literature on healthcare organizations
- Funding Announcement



WHAT DO YOU THINK NCI SHOULD DO?

ACKNOWLEDGEMENTS

Speakers

- Gregory Aarons, Elisabeth Beaber, Jose Escarce, Jennifer Haas, Sylvia Hysong, Jill Marsteller, Brian Mittman, Jasmin Tiro, Sallie Weaver, Bryan Weiner

Breakout leads and co-leads

- Gregory Aarons, Jose Escarce, Sarah Birken, Sylvia Hysong, Jill Marsteller, Brian Mittman, Jasmin Tiro, Sallie Weaver, Bryan Weiner

Meeting Organizers

- Prajakta Adsul, Erica S. Breslau, Melba Campbell, Paul Doria-Rose, Rachel Eisinger-Baskin, Bessie Frazier, Sarah Kobrin, Josh Medel, Sharon McCarthy, Rachel Pisarski, Elizabeth Sarma, Jennifer Schaefer, Elizabeth Siembida