A Complex-Systems Orientation

to Evaluation that Supports a

Culture of Health

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Welcome!

Every now and then a [person's] mind is stretched by a new idea or sensation, and never shrinks back to its former dimensions. **— Oliver Wendell Holmes, Sr.**

I would not give a fig for the simplicity this side of complexity, but I would give my life for the simplicity on the other side of complexity. **— Oliver Wendell Holmes, Sr.**

This concept paper is about the simplicity on the other side of complexity. It may not be enough to give your life for, but hopefully it's enough to inspire you to think and dialogue about how you frame your approach to evaluation and to consider what reframing might be helpful.

One way evaluators may contribute more usefully to creating a Culture of Health is by understanding fundamental distinctions between the hierarchical and networked structures of systems and how they are intertwined in complex systems. Distinguishing between these two structures helps evaluators ground their evaluations in the fundamental structures that are of importance at a particular time and place as they support evaluation users in their intention to transform systems to serve the public good.

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The Paper's Orientation

Since evaluation's inception as a field in the 1960s, the field has been dominated in the U.S. by an implicit bias toward hierarchical structures that tend to be stable, predictable, and controllable. Such controlled dynamics are the basis of hierarchies and factory models of organization. In about the 1980s, systems theorists ranging from mathematicians and physicists to biologists, sociologists, psychologists, and ecologists began to understand complex systems as having networked structures with emergent dynamics that internally change, forming flexible, complex non-linear patterns (sometimes called "self-organizing" dynamics). The capacity of computers was becoming sufficient to model these emergent patterns in a reasonable amount of time.

With the expanded capacity of computers and social networks, evaluators can more powerfully contribute to understanding how to influence social conditions for the public good by grounding their evaluation practice in the fundamentals of complex systems. Influencing social conditions through influencing complex social systems is at the heart of creating a Culture of Health.

The Paper's Purpose

This concept paper provides a way to think about complex systems. The paper counters evaluation's bias toward assuming that an evaluation is occurring within hierarchical structures with their controlled and stable patterns of movement ("dynamics"). This dominant approach pays insufficient attention to the emergent dynamics of networked structures that characterize many systems that also contribute to a culture of health.

The evaluation field's tendency to focus largely on hierarchical structures is evidenced, for example, in program logic models that focus on desired measurable outcomes and the program's efficiency within the confines of a hierarchically structured system. Such evaluations typically pay limited attention to other results of the intervention that are not within the control of the program.

A complex-systems orientation shifts evaluators' attention to multiple patterns over time based on the intertwined nature of hierarchical and networked structures within complex systems. We begin by looking at complex systems and then return to a culture of health and suggest some implications for evaluators and evaluation users.

The specifics of how to apply such an orientation to evaluation are in need of conversation and development. This paper is intended to stimulate conversations rather than provide final answers.

Purpose:

❖ To encourage evaluative inquiry of complex systems

❖ To ground evaluative inquiry of complex systems in:

~ understanding how hierarchical and networked structures create complex systems

~ recognizing evaluation's implicit bias toward hierarchical systems

Key Points of the Paper

A culture of health is a complex system	*Dominant evaluation approaches have an implicit bias counter to a complex systems orientation*	*Evaluation to support the creation of a culture of health needs to be congruent with the fundamental nature of complex systems*

The Robert Woods Johnson Foundation's Culture of Health involves four research-based action areas. They interact to create improved population health, well-being, and equity.

The four action areas are:

- making health a shared value

- fostering cross-sector collaboration to improve well-being;

- creating healthier, more equitable communities; and

- strengthening integration of health services, and systems.

Today's dominant evaluation methodological orientation has an implicit bias toward systems with hierarchical structures. This dominant orientation fails to recognize the important and fundamental differences between the hierarchical and networked structures that intertwine to form complex systems.

As evaluators, we can assist evaluation users in seeing, understanding, and influencing the development of a culture of health by using orientations and consequent methodologies that are congruent with the nature of the entangled structures and dynamics of complex systems.

This paper illuminates why and how to leverage two fundamentally different system structures—hierarchical and networked—when using a complex-systems orientation in evaluation.

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What We Mean by:

- ❖ Evaluation & Evaluative Thinking
  - ▪ Example
- ❖ Systematic & Systematic Inquiry
- ❖ Knowledge & Knowledge Management
- ❖ Systems
  - ▪ Systems Thinking
- ❖ Complex Systems
  - ▪ Thinking in Complex Systems
  - ▪ Hierarchical Structures
  - ▪ Hierarchical Structures within Complex Systems
  - ▪ Networked Structures
  - ▪ Characteristics of Networked Structures
  - ▪ Networked Structures within Complex Systems
  - ▪ Complex Systems: Entangled Hierarchical and Networked Structures
- ❖ Systems Change
- ❖ System Conditions
- ❖ Implicit Bias
  - ▪ Evaluation's Implicit Bias

and Why it Matters

01

What We Mean and Why It Matters

Our society is deeply rooted in thinking in terms of "stable systems," by which most people mean hierarchical structures with controlled dynamics. To think about complex systems, we need to add new terms and concepts and redefine some existing terms.

This section explains how to think differently about concepts that seem familiar but have a different meaning in the context of complex systems. It is especially important to grasp the differences between structures that tend to have controlled, stable patterns of dynamics (hierarchical structures) and those that tend to have flexible, emergent dynamics (networked structures).

...[E]very instance of language use makes its own small contribution to reproducing and/or transforming society and culture, including power relations. (Fairclough & Wodak, 1998).

What We Mean by:
- ❖ Evaluation & Evaluative Thinking
- ❖ Systemic & Systematic Inquiry
- ❖ Knowledge & Knowledge Management
- ❖ Systems
- ❖ Complex Systems
- ❖ Systems Change
- ❖ System Conditions
- ❖ Implicit Bias

Evaluation & Evaluative Thinking

According to the *Encyclopedia of Evaluation:*

> *Evaluation is an applied inquiry process for collecting and synthesizing evidence that culminates in conclusions about the state of affairs, value, merit, worth, significance, or quality of a program, product, person, policy, proposal, or plan.*
>
> *Conclusions made in evaluations encompass both an empirical aspect (that something is the case) and a normative aspect (judgement about the value of something). It is the value feature that distinguishes evaluation from other types of inquiry, such as basic science research, clinical epidemiology, investigative journalism, or public polling."* (Mathison, 2005)

Of particular importance is the last statement that emphasizes that "it is the value feature that distinguishes evaluation from other types of inquiry."

The field of evaluation as practiced in the U.S. and most other countries is grounded in an assumption that humans have equal rights. Also evaluation is done within real world settings, not laboratory settings disconnected from the context in which the entity is to function.

Thus the definition of evaluation does not end with systematic inquiry, but uses this inquiry to determine merit, worth, and/or significance.

Evaluation is *systematic inquiry* to *determine merit* (quality), *worth* (value), and *significance* (importance) about some entity or purpose.

Evaluative Thinking Example

For example, assume you are looking for a new car.

You find an electric car that is of very high quality (merit). It is of high value (worth) to you because it aligns well with your commitment to environmental responsibility. However, if your daughter suddenly becomes seriously ill and you need to spend your money on health care for her, the car drops in its importance (significance) because your daughter is more important to you than a car.

Traditionally, evaluators have made evaluative determinations based on their systematic inquiry and predetermined criteria. As the complexity of society has become more evident, evaluators have begun to engage a full range of stakeholders with multiple perspectives in determining merit, worth, and significance. Additionally, they are learning to help people balance merit, worth, and significance in complex systems.

> *Evaluative thinking* involves balancing *merit, worth, and significance.*

Systemic & Systematic Inquiry

There are many different methodologies for engaging in systematic inquiry in ways that are both ethical and of high quality. We are not addressing the range of methodologies in this paper; rather the focus is on doing an inquiry from a systemic perspective.

Three key points for an inquiry are:

- The evaluator engages in *systemic* as well as systematic inquiry.

- In thinking systemically and systematically, the evaluator looks broadly and deeply into the content, context, conditions, and connectivity of the systems involved.

- The theory of change guiding a systems-oriented evaluation typically needs to rely on a strong interdisciplinary body of knowledge.

- Engage in *systematic* **and** *systematic* inquiry.

- Consider *content, context, conditions,* and *connectivity*.

- Use *interdisciplinary* knowledge.

Knowledge & Knowledge Management
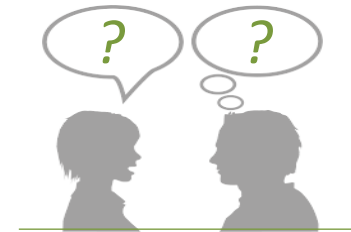
Complex systems involve multi-disciplinary knowledge. Accessing and synthesizing a broad range of knowledge to assist evaluation users in developing an appropriate theory of change becomes an increasingly important role for evaluators when working with complex systems. Evaluators and evaluation users typically are familiar with a more limited range of disciplinary knowledge than what is relevant when working in complex systems.

This paper does not address knowledge management but it is a critically important aspect of engaging in systems-oriented evaluation. Fortunately, more technologically-supported means for knowledge synthesis and management are emerging but much more development is needed for efficient management of the knowledge relevant to seeing, understanding, and influencing complex systems.

Knowledge management (KM) is the process of *creating, sharing, using and managing* the knowledge and information of an organization.
(Girard & Girard, 2015)

Systems

A system is a collection of entities that are "seen" by someone as interacting together to do something. (Open University, 2011)

Several aspects of this definition are important:

- It is a collection of entities; multiple elements are involved.

- Different people may be seeing a different collection of entities interacting together, thus, seeing a different system.

- The quotation marks around "seen" remind us that these systems may be seen in our mind's eye rather than necessarily being seen physically. Systems are most often conceptual models rather than physical entities.

- The entities are interacting. There are both connections and dynamics in those interactions. Notice movement **and** energy.

- The interacting entities are doing something. They create a result that is different than the results of the sum of the parts.

- In evaluation, desired outcomes are typically thought of as the result that a system produces. However, this is too narrow of a definition of what a system does. A system is likely to do more than produce the outcomes someone is hoping to see. For example, the result can be changes in patterns within the systems, not only specific products.

System: A system is a *collection of entities* that are *"seen" by someone* as *interacting* together to *do something.* (Open University, UK)

Systems thinking: Thinking in terms of *systems rather than the parts;* thinking about *movement, dynamics, and patterns* across time and locations; thinking in systems

Systems Thinking

Regarding human and other living systems, systems thinking involves thinking about structures, dynamics, and patterns across time and locations. Sometimes it is referred to as "thinking in systems".

Look at the pictures on this page. What systems do you "see"? **(**The pictures may show only a part of a system.) For example, the picture of food in a market may lead you to think of a system of:

- transportation from farm to market

- the flow of money related to agriculture

- the interaction of people at a local farmers' market

What systems do you see in this picture and the other pictures below?

System: A system is a *collection of entities* that are *"seen" by someone* as *interacting* together to *do something.* (Open University, UK)

Systems thinking: Thinking in terms of *systems rather than the parts;* thinking about *structures, dynamics, and patterns* across time and locations; thinking in systems

Complex Systems

Complex social systems are composed of massively entangled structures. For example, they involve interconnected families; hierarchical, bureaucratic organizations; and networks of small formal and informal groups. Not only are they entangled, they are also in motion with complex patterns.

From a theoretical perspective, complex systems can be thought of as an entangled mix of hierarchical and networked structures (see following pages). Hierarchical and networked structures are associated with differences in their dynamics, i.e., their patterns of movement over time; their predictability; and their knowability.

Complex systems have been studied extensively in different disciplines with an accumulation of knowledge about the differences in how they function. The Reference list includes a few sources that we have found helpful when applying systems concepts to evaluation.

Understanding a complex system bears similarities to comprehending this optical illusion, which contains images of both a young woman and an old woman. Both images are within the picture but if one is overly dominant in our view, we can't see the other.

We want to get to the point where we can move our focus back and forth between hierarchical and networked structures to see the complex system as a whole.

Complex systems: Complex systems are *massively entangled systems* that include both *hierarchical and networked structures.*

Thinking in Complex Systems

Look again at the pictures you looked at on an earlier page. Think about the entanglements of multiple systems that you can see in the pictures.

Hierarchical Structures

A major advance with the Industrial Revolution was the development of factories and assembly lines. These were often accompanied by hierarchical organizational structures to manage people. The underlying assumption is that planning is useful because there is a predictable relationship between activities and results. Such structures are designed to give considerable control to an organizational leader or manager. These structures are further controlled by rules and policies; they tend to have parts that can be replaced.

When asked to identify a system, we have found that people usually name some type of hierarchical structure (e.g., the education "system"). Hierarchical structures are pervasive in government, business, and the nonprofit organization worlds. They have many subsystems within them that are similarly structured (e.g., the management system, the accounting system).

When conditions are stable and predictable and the function of the structure is to produce well-defined products or outcomes, this type of structure can work well. For example, we want control and stability in an organization's payroll department to assure timely and accurate paychecks.

The assumptions of stability and predictability serve as the basis for thinking that one program can be replaced by another within a social system and that, if each part is working well, the overall system will also be working well.

Hierarchical structures tend to create *controlled dynamics with stable, predictable patterns.* They have constraints within or around them that create their predictability.

Many tools and methods exist for understanding and influencing hierarchical structures. These tools and methods, based on linear models of cause and effect, include strategic planning, setting specific outcomes, and using research designs such as randomized controlled trials (RCT).

Hierarchical Structures within Complex Systems

- ❖ **Fundamental Structure:** hierarchical, mechanistic

- ❖ **Dynamic**: controlled, stable, predictable, "regular," cause and effect

- ❖ **Patterns:** linear, repetitive, interchangeable parts

- ❖ **Examples**: bureaucracies, assembly lines
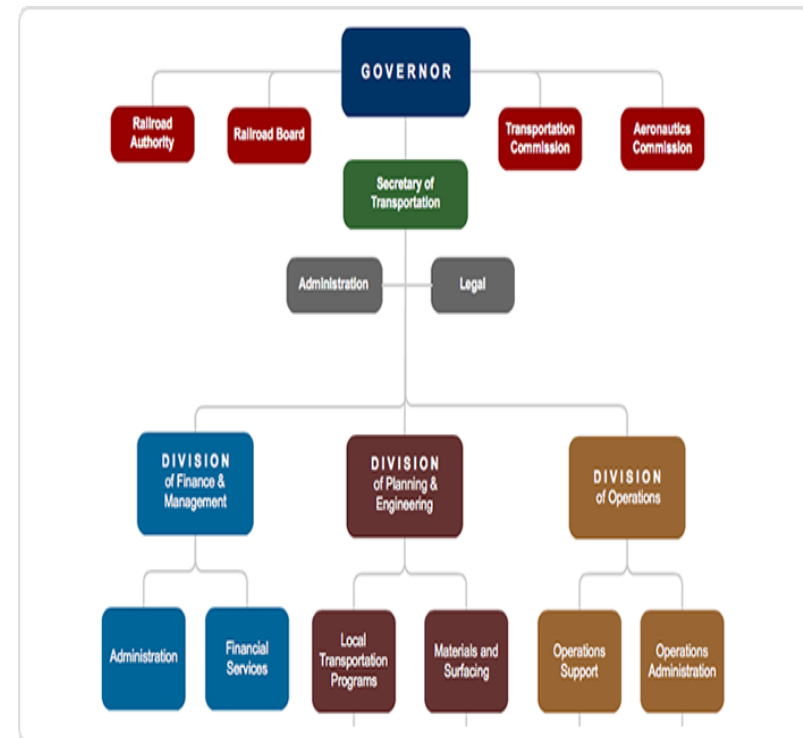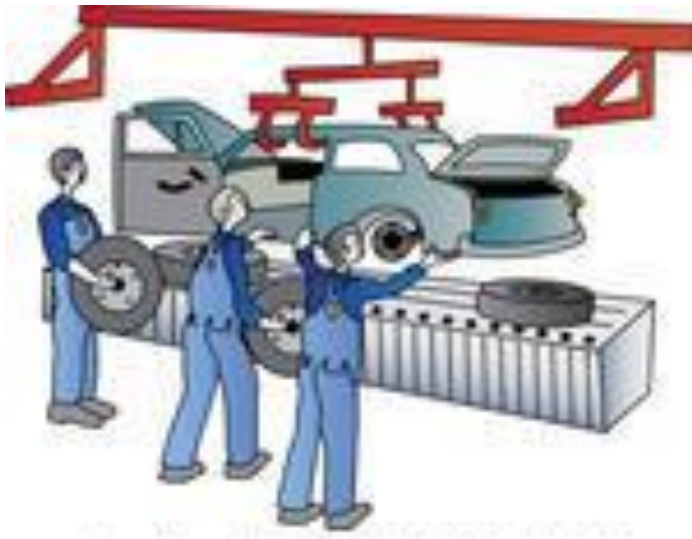
Networked Structures

The complexity sciences have their beginnings centuries ago, but the ideas started to receive serious attention in the scientific community in about the 1980s (Capra, 2014). The understanding and applications of the concepts of networked structures with emergent (or "self-organizing") dynamics are still in their early stages of development. The concept originated in the physical, biological, and ecological sciences; it has mathematical underpinnings.

In a networked structure, we see the emergence of new, unexpected processes and patterns of movement. These higher-level emergent dynamics unexpectedly result from the actions of a multiplicity of small occurrences within the system. The small occurrences were not planned to create the new order. The emergence of the new is not controlled by a single entity, but results from semi-independent interactions of many agents. They are adapting to each other and the environment as a whole. These interactions can form patterns over time and locations. Those patterns may not be visible to the agents themselves and the timing of the patterns is often unpredictable.

Networked structures may be disturbed by external influences but they tend to be without external control. Networked structures such as the human networks on the Internet display emergent dynamics: they are flexible and adaptive; no leader is in control.
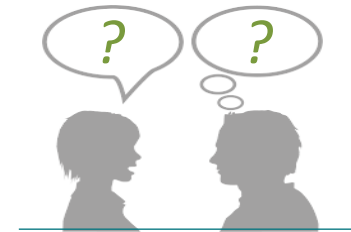
Network structures function far from equilibrium. They can create *emergent dynamics* with new, unexpected, self-organizing patterns, properties, and/or processes.

Characteristics of Networked Structures

Networked structures also:

- are sensitive to initial conditions. In complex systems, very small differences in initial conditions can have a disproportionately large impact on future events.

- are influenced by iterative feedback. The agents are "learning" from one another and the context as they get signals from other agents and modify their behavior.

- co-evolve. Co-evolution refers to the interdependent evolution of two or more structures within a larger ecological system. Cooperation, competition, and interdependence in relation to the same limited resources create feedback among the entities through the structures in a complex system.

- have active boundaries. A system's boundaries are created by the structure itself. Dynamic structures such as a network's have active boundaries as they interact with their environments.

- may operate far from equilibrium. They can have a wide range of emergent dynamics with patterns of movement that may be very complex.

- can shift into new structures. The shift into a new organizational structure can arise from fluctuations amplified by certain types of feedback loops.

Networked structures can create *emergent dynamics* with new, unexpected, self-organizing patterns, properties, and/or processes.

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Networked Structures within Complex Systems

- ❖ **Fundamental structure:** networks of nodes and connections

- ❖ **Dynamic**: flexible, creative, emergent

- ❖ **Pattern:** co-evolving, semi-independent agents influencing nearby agents

- ❖ **Examples**: networks, social movements, movements of movements, swarming of birds, schools of fish

Complex Systems: Entangled Hierarchical and Networked Structures

Seldom would an identified system have the pure features of a hierarchical or networked structure as described above. Rather social systems are a mix of structures although they may tend in one direction or the other in their overall character. Hierarchical and networked structures are lenses through which we view complex systems. Each lens reveals different aspects of the complexity and gives us insight into its functioning.

Complex living systems generally have some aspects that can be modeled well by thinking of them as hierarchical and/or networked structures.

Organizational partnerships and communities are good illustrations of complex systems where hierarchical and networked structures both can be identified fairly readily.

Partnerships

Communities

Systems Change

We often hear people talk about wanting to bring about change in systems through their interventions. When engaging in evaluation related to changing systems, we need to be very aware that the systems naturally are already in motion and changing. We need to be aware that the intervention is not entering a static system. Interventions are likely to change the *pattern* of change rather than simply create change.

Human systems are continually changing in and of themselves *and* through their connections with other systems. They are living systems that are continually changing whether or not there is an intervention. This is especially true of systems with networked structures.

Interventions such as programs, policies, people, and initiatives are *changing the patterns of change* that are already present in the systems.

It is also important to recognize that an intervention may be affecting more systems than those focused on by the intervenor. The complexity of the interconnected systems, the unpredictability of patterns of change in these systems, and the sustainability of changes all need to be taken into account when evaluating an intervention in complex living systems.

Complex living systems are continually changing based on their *internal dynamics* as well as *outside influences.*

The *influence of an intervention depends on the existing structures and dynamics* of the systems being affected.

Programs, policies, people and other interventions influence *the patterns of change* that are already present in the systems.

System Conditions

Systems theorists have identified common features or conditions of systems. Drawing on the work of Williams and Hummelbrunner (2009) and Eoyang (1997), we use Interconnections, Boundaries, and Perspectives as a basic way to frame the conditions that determine the nature of human systems and their special relevance to evaluation. As we conduct a complex-systems evaluation, we need to pay special attention to:

- Understanding interconnections (interrelationships)

- Maintaining an awareness of boundaries

- Recognizing multiple perspectives

Interconnections, boundaries, and perspectives are not isolated from one another. As you change one, you affect another. Think of the three conditions as the angles of a triangle. As you change one angle you affect the other two.

These conditions are relevant at any phase of evaluation. They can also be used to understand complex systems with their entangled combinations of hierarchical and networked structures.

Understanding the interplay among these conditions is part of the challenge of thinking in systems. We need to approach it with the "forest and the trees" mind set. We have to be able to shift in and out of focus between seeing the forest and seeing the individual trees.

These system conditions can be used to help you identify the structures and their dynamics in the systems that you are going to be evaluating and choose evaluation designs that are congruent with these structures.
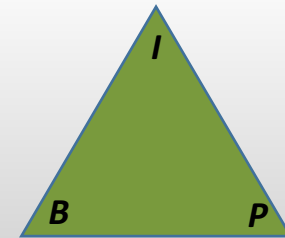
Human systems have three general common system conditions:

Interconnections

Boundaries

Perspectives

Implicit Bias

An implicit bias is different from *a suppressed thought* that someone might conceal. Implicit biases are *"biases that are activated involuntarily and beyond our awareness or intentional control"* (Staats, Capatosto, & Contractor, 2015, p. 5). Implicit biases often show up in our language.

"Unwanted implicit biases can be mitigated…. By taking the time to understand your personal biases, you can begin to mitigate their effects…. Implicit biases have huge implications; thus it is important to identify your own biases and then actively engage in debiasing techniques to address them." (Staats, Capatosto, & Contractor, 2015, p. 5).

There is growing attention to structural racism as the result of implicit biases. Structural racism refers to the normalization and legitimization of institutional policies and practices that routinely advantage whites while producing cumulative and chronic adverse outcomes for people of color. Structural racism becomes a system of its own due to these interconnected organized systems.

The term "implicit bias" can also be applied to what is happening in evaluation even though the impact is very different than that resulting from structural racism.

When it comes to evaluation, a *critically important implicit bias is toward a model of systems with hierarchical structures and controlled dynamics.* This pervasive bias has many implications for evaluation.
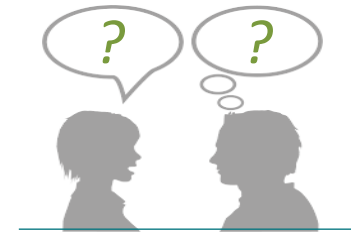
"Implicit bias is concerned with unconscious cognition that influences under-standing, actions, and decisions". This is different from individuals consciously suppressing or not sharing their beliefs because others may view their beliefs as socially undesirable.

Evaluation's Implicit Bias

Evaluation's implicit bias towards a hierarchical or mechanistic orientation is aligned with the way of thinking that has dominated our society since the Industrial Revolution when systems were thought of as stable. Consider the factory where an assembly line of workers fits parts together to create a final product. The mechanistic model is also reinforced by business, which seeks a high-quality outcome through efficiency and effectiveness. The high-quality product/outcomes becomes the aim of the work.

There's a whole school of design that comes out of this business model. In this kind of design, people go out into the community to find out the people's needs. They are good at investigating people's lives in friendly, non-obtrusive ways. They get to know a culture with the purpose of coming up with ideas about problems that could be solved with a product that they can develop. They do not identify issues that can be solved by people simply working or living together differently without more products. Instead, it's about finding something that could be the basis of a product the business can sell to the people. That model of design is moving into evaluation without recognizing that the design has an implicit bias toward the production of something.

Even though evaluation has approaches such as developmental evaluation and participatory evaluation, evaluators' implicit bias toward linearity leads to viewing networked structures within complex systems as an add-on to the hierarchical structure rather than as a system structure in its own right.

Evaluation tends to have an implicit bias, unrecognized by evaluators and evaluation users, *toward assuming systems change in a linear fashion.*

Taking *a complex systems orientation will be of little consequence* unless we *confront the power and significance of the implicit bias* we have toward a linear systems model.

Why it Matters

In summary, because of the tendency in the field of evaluation to focus on hierarchical structures with controlled dynamics and/or to be unaware of complexity sciences, this section has provided a set of vocabulary and concepts that are important for evaluators to understand. Without such understanding, evaluators tend to use methodologies that are grounded in mechanistic (linear mathematical) models that are congruent with hierarchical structures rather than developing models where hierarchical structures are entwined with dynamic network structures.

A Complex-Systems Orientation to Evaluation

❖ A Complex-Systems Orientation to Evaluation
  ▪ Complex-Systems Oriented Evaluation Design

❖ Evaluation Grounded in Hierarchically-Structured Systems

❖ Evaluation Grounded in Network-Structured Systems
  ▪ Example

❖ Contrast of Evaluative Focus in Hierarchical and Networked Structures

02

A Complex-Systems Orientation to Evaluation

This section of the paper shifts the focus to taking a complex-systems orientation to evaluation. That is, as evaluators, we accept that we are working with a web of entangled structures with many gradations of dynamics that range from controlled and stable to emergent and flexible. Within this dynamic web, we work with evaluation users to identify the systems within this web that we are going to investigate through the evaluation.

Recall our earlier definition of a system: "A system is a collection of entities that are 'seen' by someone as interacting together to do something." Thus, our initial step in conducting a complex-systems oriented evaluation is to interactively develop a picture (literally or figuratively) of the multiplicity of hierarchical and networked structures as seen by an array of stakeholders relevant to the work. From there, we highlight and put our focus on those deemed to be the most important starting point for the evaluation. We will not be discussing the details of how to engage in such determinations in this paper.

A system is a collection of entities that are 'seen' by someone as interacting together to do something.

Complex systems are *massively entangled systems* that include both *hierarchical and networked structures.*

Complex-Systems Oriented Evaluation Design

The evaluator looks for the presence of the two basic system structures—hierarchies (controlled dynamics) and networks (emergent dynamics)—in the systems emphasized in the evaluation. The evaluator considers the implications of the structures and their dynamics for the evaluation. (Although there are many other aspects of complex systems that we could address, this is our focus in this paper.)

We align the evaluation design with the fundamental structures. As noted in the above discussion, any given evaluation is likely to have a mix of methods and orientation. However, at this point we want to clarify the system structures in which the evaluation is fundamentally "grounded."

- Is the evaluation grounded primarily in affecting the hierarchical structures within which the intervention is located?

AND/OR

- Is the evaluation grounded in influencing the dynamic networks of nodes and connections?

Evaluation Grounded in Hierarchical Structures

When the fundamental structure is a hierarchical one, the evaluation emphasis is most likely going to be on features of hierarchical structures such as programs, policies, and practices within the relevant systems. Although adaptation of an intervention may be a major area of concern and the systematic inquiry process itself may consume the major amount of time, the **evaluative** aspect is likely to emphasize:

❖ Measuring outcomes

❖ Linking outcomes and activities

❖ Applying predetermined evaluation criteria

❖ Building evaluation capacity around technical aspects of determining outcomes and evaluation criteria
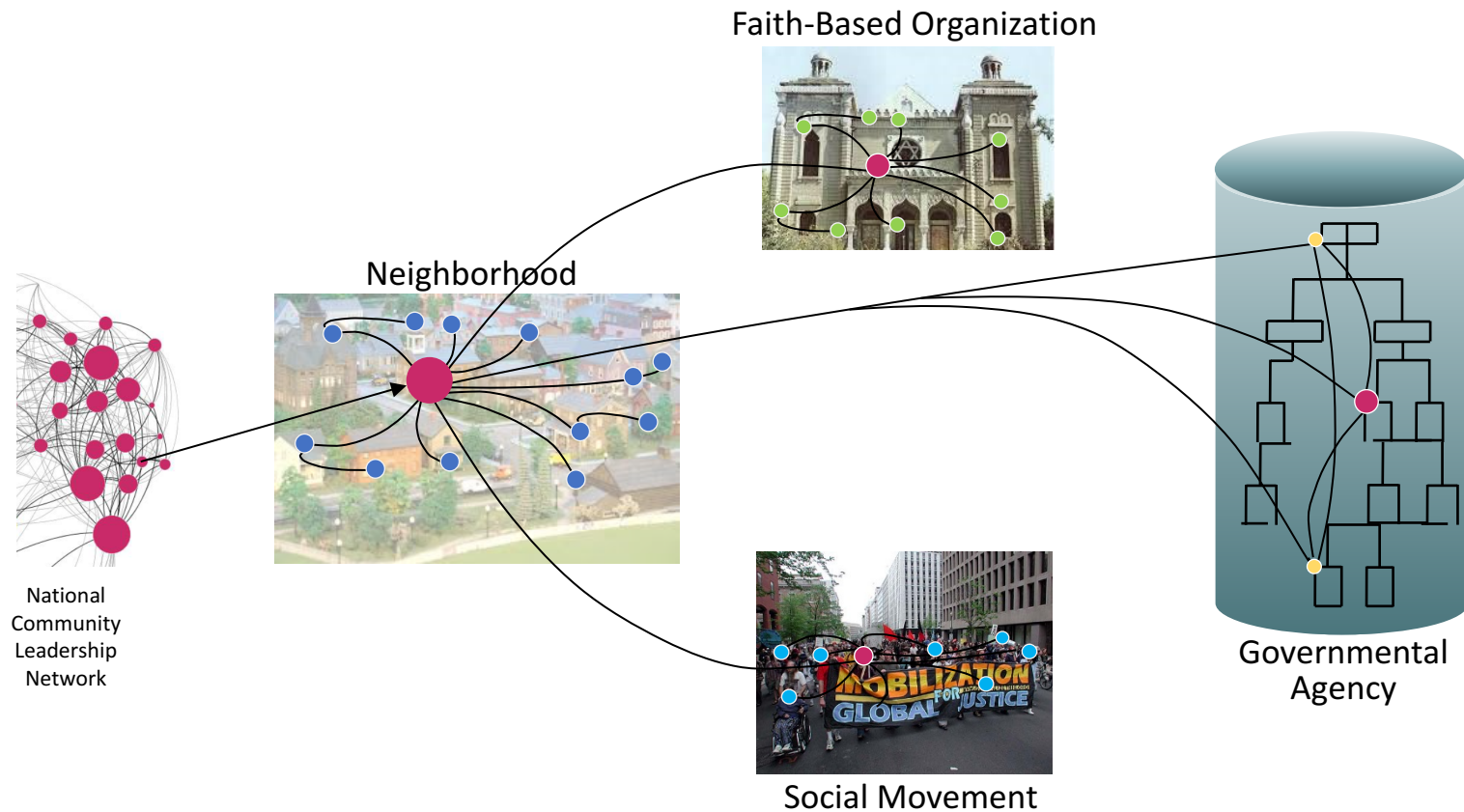
Evaluation Grounded in Networked Structures

When the fundamental structure is a network, the evaluation focuses on the fundamental features of networks—nodes and connections. These nodes and connections may well include hierarchical features but the emphasis is on the networked aspects. Thus the **evaluative** aspect is likely to emphasize:

❖ Mapping patterns of movement and change related to values

❖ Facilitating conversations about merit, worth, and significance

❖ Building the capacity of networks to sustain contextually appropriate attention to merit, worth, and significance among multiple stakeholders
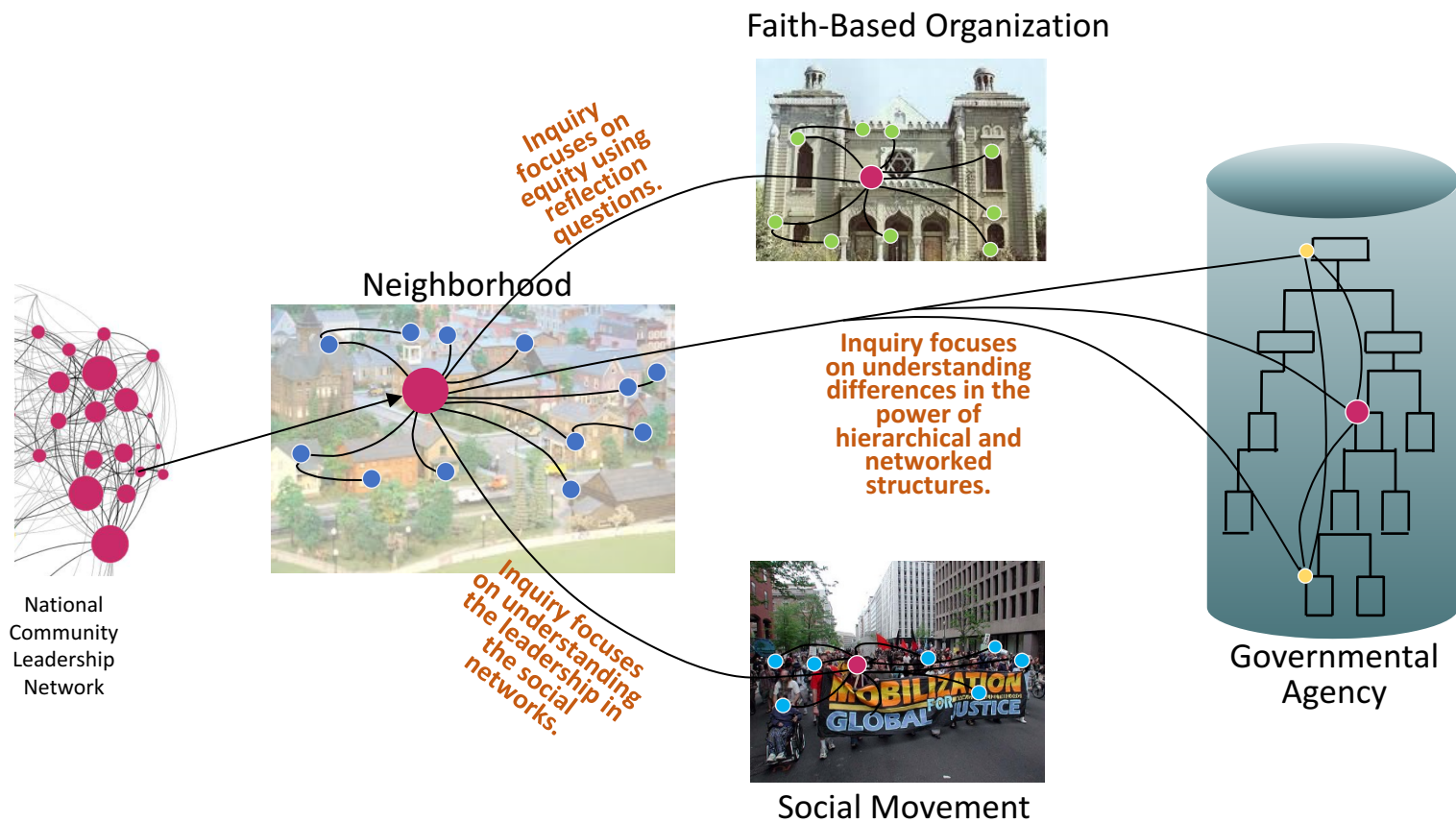
Example of Evaluation Grounded in Networked-Structures

Assume that the intervention of interest is a national network to support a culture of health. If the evaluation is to be grounded in networked structures, the evaluation may focus on following various members of the national network as they work through networks in their community location. The diagram below illustrates the networks of one member of a national network. The network on the left is a portion of the local community; one member of the network is being followed into her community. The rest of the diagram shows that person in her local networks.

Faith-Based Organization

Neighborhood

National
Community
Leadership
Network

Social Movement

Governmental
Agency

Example of Evaluation Grounded in Networked-Structures

When the evaluator of the national network conducts an evaluative facilitation and inquiry in this network member's community, she might focus her evaluation on equity, leadership, and power differentials in the various structures in the community as illustrated below.

Faith-Based Organization

Inquiry focuses on equity using reflection questions.

Neighborhood

Inquiry focuses on understanding differences in the power of hierarchical and networked structures.

Inquiry focuses on understanding the leadership in the social networks.

National Community Leadership Network

Social Movement

Governmental Agency

Contrast of Evaluative Focus in Hierarchical and Networked Structures

Hierarchical Structures

❖ Measure outcomes

❖ Link outcomes and activities

❖ Apply evaluation criteria

❖ Build evaluation capacity about aspects of systematic inquiry

Networked Structures

❖ Map patterns of movement and change related to values

❖ Facilitate conversations about merit, worth, and significance

❖ Build capacity of networks to sustain contextually appropriate attention to merit, worth, and significance

A Complex-Systems Orientation to Evaluation that Supports a Culture of Health

❖ Culture

❖ A Culture of Health

❖ A Culture of Health Action Framework

❖ Example of an Evaluation Situation and Approach

▪ Example Evaluation Background
▪ Example Evaluation Approach
▪ Example Evaluation Questions: Interconnections, Boundaries, Perspectives

03

Culture

Culture is defined in a number of ways. Here are three:

- Culture is a shared set of values, customs, and beliefs common to a particular group or society that produces patterns of behaviors and experiences.

- Culture as multiple discourses, occasionally coming together in large systemic configuration, but more often coexisting within dynamic fields of interaction and conflict. (Dirks, Eley, & Ortner, 1994, p.4)

- In contrast with the classic view, which posits culture as a self-contained whole made up of coherent patterns, culture can arguably be conceived as a more porous array of intersections where distinct processes crisscross from within and beyond its borders. (Rosaldo, 1993, p. 20)

All said, culture is a complex system with massively entangled entities and hierarchical and networked structures. Its boundaries are permeable and it is dispersed through society. Some cultural aspects are imposed by outside groups or individuals while others arise from within the group.

Culture is often thought of in terms of racial or ethnic groups. Culture emerges in many groups. A business, neighborhood, community, sports team, family, or network develops its culture over time. The shared values, customs, and beliefs may or may not be explicit and a member of the group may be conscious or unconscious of the culture.

Culture is a complex system with massively entangled entities and hierarchical and networked structures.

A Culture of Health

The aim is to *focus on building a culture of health* rather than focusing only on health care services.

To accomplish this, *changes must be made* in beliefs and assumptions, and the structures of social systems.

"Recognize that health and well-being can be greatly influenced by complex social factors: where we live, how we work, the soundness and safety of our surroundings, and the strength and resilience of our families and communities"*

"Comprehensive Culture of Health…enables all in our diverse society to lead healthier lives, now and for generations to come"*

"Creating a society that gives all individuals an equal opportunity to live the healthiest lives possible, whatever their ethnic, geographic, racial, socioeconomic, or physical circumstances happen to be"*

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RWJF is **focused on building a culture of health** that emphasizes equity and an understanding that health is determined by many social conditions. By labeling their work as *Culture* of Health, RWJF recognizes the importance of health being based on shared values, customs, and beliefs and how these need to change within various groups to have population health, well-being, and equity. RWJF's approach contrasts to one that focuses only on health-care services. The health-care-service approach assumes that individuals are largely responsible for their own health; it ignores the inequities and the confusing processes and multiple orientations within health care and other social determinants of health.

RWJF's approach focuses on people changing their beliefs and assumptions and the structures of their social systems, i.e., changing the culture to a Culture of Health.

A Culture of Health Action Framework

CULTURE OF HEALTH
ACTION FRAMEWORK

ACTION AREA
1
MAKING
HEALTH A
SHARED VALUE

ACTION AREA
2
FOSTERING CROSS-SECTOR
COLLABORATION TO IMPROVE
WELL-BEING

EQUITY ·······

OUTCOME
IMPROVED POPULATION
HEALTH, WELL-BEING,
AND EQUITY

······· EQUITY

ACTION AREA
3
CREATING HEALTHIER,
MORE EQUITABLE
COMMUNITIES

ACTION AREA
4
STRENGTHENING
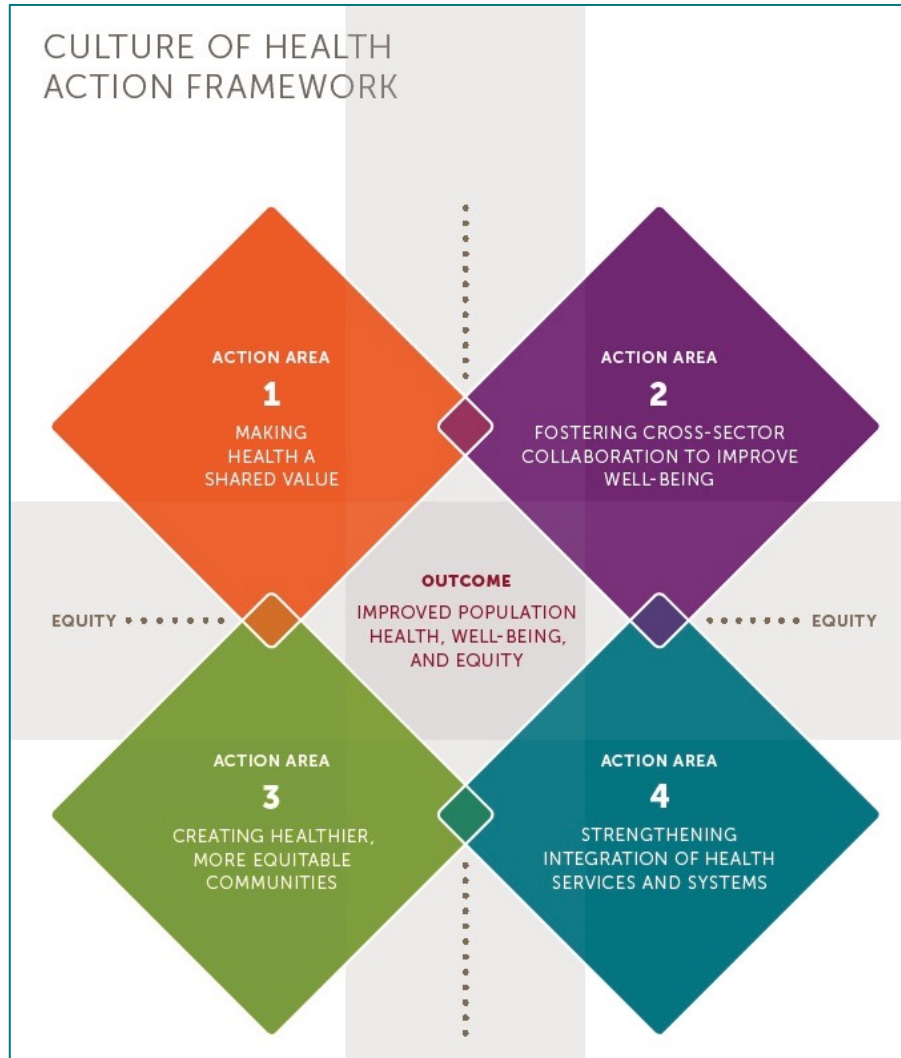INTEGRATION OF HEALTH
SERVICES AND SYSTEMS

Image copyright 2015 Robert Wood Johnson Foundation/*From Vision to Action: A Framework and Measures to Mobilize a Culture of Health.*

Based on these general beliefs and assumptions, the Foundation has identified four areas for action to bring about the culture shift. The foundation has also stated an encompassing outcome that would result from this shift.

Note that the framework is broad. It does not give specific actions for people to take but provides the areas on which to focus and incorporates the beliefs that are key to the new culture. It is giving people at any place in society areas in which to focus.

Building a new culture may be less about actions we do and more about a dialogue that flows through and among us.

Example of an Evaluation Situation and Approach

A coalition that recently received a grant has requested suggestions about conducting its evaluation to determine if the many systems involved in their work are actually functioning in a way that changes the culture regarding health. They are using the RWJF Culture of Health Action Framework as their guide.

The example provides suggestions related to the general evaluation approach and evaluation questions.

Here's the grantee situation:

Over a 20-year period, a coalition has guided the locating of a wide range of health-care services in one health-care complex. The coalition, located in a low-income region of a southwestern state, includes various entities such as nonprofit organizations, health-care service providers, and residents from the urban neighborhoods and rural areas. Several years ago, with community input, the coalition developed a statement of shared values.

A community survey revealed a need for access to more healthy food. So, the coalition is now planning to add a grocery store in the health-care complex.

The coalition members have an understanding of complex systems from a recent round of seminars. They are particularly interested in the nodes and connections of the networks and webs of their community and whether they, as members of a coalition, are an important node in building an economically-equitable community. They are also aware that community organizers who are new members of the coalition think that the community survey provided an inadequate understanding of the community as a whole.

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Example Evaluation Situation

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Coalition members are pleased with the progress they have made on overall indicators of population well-being and health, but they are not sure if deep changes in the culture (changes in values, beliefs, and assumptions) are occurring that will support a sustainable culture of health as described by the RWJF Culture of Health action framework.

The coalition has worked collaboratively in the health complex to build a widespread understanding of the centrality of health in the governmental agencies, businesses, schools, and universities. Health-care service providers are integrating their technological systems to share data and make it easier for residents to work with multiple providers. They now recognize that these efforts are all focused on hierarchical structures.

They are uneasy about whether sufficient attention is being given to building an economically-equitable community, a structure that is more grounded in networks.

In their next phase of evaluation they want to focus specifically on the functioning of their coalition as a node within the many interconnected networks and webs of their community that are especially relevant to building an economically- equitable community.

Example Evaluation Approach

Working with a systems-oriented evaluator from a nonprofit organization that is a member of the coalition, the coalition members began by identifying these guidelines for conducting a systems-oriented and network-focused evaluation.

- Use broadly defined **boundaries** for determining what types of networks and webs exist in the community that may be relevant.

- Attend to the **interconnections** (especially power relationships**)** among the full range of stakeholders (individuals and collective entities) in the situation.

- Look for patterns of **interconnected** nodes; look for many types of resources; and look at how these various resources flow through the network and are exchanged in the nodes of the networks.

- Encourage transparency of **perspectives** (values, beliefs, and assumptions) in all phases of the evaluation.

- Emphasize facilitation that determines merit, worth, and significance throughout the process as it relates to health for all.

- Focus on asking the "right" questions for purposes of shared reflection and inquiry rather than necessarily answering the questions in a final sense.

- Emphasize building the capacity of coalition members to engage in evaluative, reflective inquiry that helps them expend the least effort to build the self-organizing capacity of the networks to support an economically-equitable community.

- Draw on expertise from multiple disciplines relevant to the situation.

Example Evaluation Questions: Interconnections, Boundaries, and Perspectives

Here are some of the questions they are considering. They ask some questions to understand the current and past interactions about the economically equitable nature of their community and how the establishment of a grocery store in the health care complex might relate to this desired condition. They ask other questions to understand the beliefs, assumptions, perspectives, and perceptions about the meaning and nature of an economically equitable community.

Interconnections

- What patterns of power relationships are present and how are they shifting?

- What is the ebb and flow of changes between the formal health organizations and the residents of the community?

- What shifts are occurring in the flow of information?

Boundaries

- What boundaries within and across organizations and with the community and its neighborhood groups are shifting?

- What differences are evident in the permeability of the boundaries within and across organizations and with the community and its neighborhoods?

- What shifts are occurring in who is involved and in what ways in various types of decision-making?

- How are patterns of action and thought shifting regarding health across generations? Who is included? Who is not?

Perspectives

- What shifts in values, beliefs, and assumptions are occurring related to equity and democracy?

- What shifts in values, beliefs, and assumptions are occurring regarding the importance of health?

- What shifts in values, beliefs, and assumptions are occurring regarding what constitutes health?

Call to Action

❖ Implications for Evaluation and Evaluators

04

Implications for Evaluation and Evaluators

This paper calls on evaluators and evaluation users to attend to two fundamental structures of complex social systems—hierarchies and networks. As a starter, consider the following:

- Engage in evaluation with attention to both hierarchical structures with controlled dynamics and networked structures with emergent dynamics.

- Recognize that evaluation capacity building is likely to look different when working with hierarchical structures versus networked structures.

- Pay special attention to evaluative facilitation as well as inquiry processes.

- Recognize that outcomes in a hierarchical structure are likely to be definable products, knowledge, or services, whereas outcomes in a networked structure are likely to be changes in patterns of action and thinking across time and locations.

- Recognize the difference in roles of the two types of structures in sustaining, restoring, and regenerating society.

- Engage in conversations with colleagues about the application of these systems concepts and share with us what you are learning.

Resources

❖ References

❖ Acknowledgements

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Acknowledgements

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