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Maximizing Influence and Sensesight: A Grounded Theory Study of How Executives Make Sense and Lead in Complexity

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Abstract

U.S. health care reform is a significant driver of complexity in healthcare organizations. The highly regulated directive began with the Affordable Care Act of 2008 and seeks to improve value of patient care by reducing costs and improving quality. However, to implement the required changes, executives must continue daily operations while they dismantle and reassemble core clinical and financial processes of the organization. The shift toward value exacerbates complexity in the already complicated and high stakes healthcare field. Complexity challenges improvement efforts and negatively impacts quality of care. Complexity also affects how executives make sense and lead. For success, executive leaders must understand the environment and maximize their influence as they balance operational logistics and cultural aspects of change. Cognitive and social-cognitive processes, such as sensemaking and sensegiving, play a pivotal role in how the leader calibrates a direction and influences the organization. This qualitative constructivist grounded theory study of 17 executive leaders explains the processes executives used to make sense and maximize influence in complex circumstances. The major finding in this study theorizes how sensesight, or insight emerging from sensemaking about sensegiving, maximizes influence during situational demands. The findings provide a theoretical model illustrating the processes and could benefit executives attempting to lead in complexity.

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Maximizing Influence and Sensesight:

A Grounded Theory Study of How Executives Make Sense and Lead in Complexity

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of the requirements for the degree
Ed.D. in Executive Leadership

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Dedication and Acknowledgements

I dedicate this work to all the human leaders trying to make sense of their realities and make a positive impact on the people, organizations, and communities they serve. This scholarly journey would not have been possible without the help and support of so many family, friends, and teachers. First, my committee chair, Dr. Theresa Pulos, the wise sage who knows just the right times to close doors and open them. Her guidance challenged me to always look for the deeper answers, while her confidence gave me the freedom to dive and find them. Dr. Derrick Suehs, my committee member, whose practical advice, professional network, and strong editing skills made it possible to exceed my target number of participants and produce a cohesive narrative. My advisor, Dr. Kim VanDerLinden, who always encouraged me with head nods and smiles, guided me with a raised eyebrow and pushed me with honest feedback about my writing. Dr. Robinson, you have changed my mind and my heart, thank you for helping me lay the brick. Dr. Evans, your humor and insight kept it real, thanks for always opening the box to remind us what's outside.

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Biographical Sketch

Ryan P. Clapper is currently director, clinical transformation, and part of the performance excellence team at St. Joseph's Health in Syracuse, NY. Mr. Clapper is a registered professional nurse, graduating from St. Joseph's College of Nursing in Syracuse, NY in 2001 with an Associate of Applied Science, Nursing degree. Clapper completed a Bachelor of Science, Nursing degree with honors in 2007 and a Master of Business, Health Care degree with honors in 2013. In May 2016, he enrolled in St. John Fisher College's Ed.D. Program in Executive Leadership, Syracuse Cohort 4. Clapper pursued research in executive leader sensemaking and sensegiving in the context of complexity under the direction of Dr. Theresa Pulos and intends to receive the Ed.D. degree in 2018.

Abstract

U.S. health care reform is a significant driver of complexity in healthcare organizations. The highly regulated directive began with the Affordable Care Act of 2008 and seeks to improve *value* of patient care by reducing costs and improving quality. However, to implement the required changes, executives must continue daily operations while they dismantle and reassemble core clinical and financial processes of the organization.

The shift toward value exacerbates complexity in the already complicated and high stakes healthcare field. Complexity challenges improvement efforts and negatively impacts quality of care. Complexity also affects how executives make sense and lead. For success, executive leaders must understand the environment and maximize their influence as they balance operational logistics and cultural aspects of change.

Cognitive and social-cognitive processes, such as sensemaking and sensegiving, play a pivotal role in how the leader calibrates a direction and influences the organization. This qualitative constructivist grounded theory study of 17 executive leaders explains the processes executives used to make sense and *maximize influence* in complex circumstances. The major finding in this study theorizes how *sensesight*, or insight emerging from sensemaking about sensegiving, maximizes influence during situational demands. The findings provide a theoretical model illustrating the processes and could benefit executives attempting to lead in complexity.

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Chapter 1: Introduction

This dissertation and associated study examine how complexity affects the ways executive leaders in health care understand the environment and how they attempt to shape the thinking of people in the organization. A qualitative grounded theory study revealed information about how executive leaders maximized their influence in a complex environment. The theoretical models of sensemaking and sensegiving provided a sensitizing foundation for the research.

Executive leaders use the cognitive process of sensemaking to understand environments and situations (Weick, Sutcliffe, & Obstfeld, 2005). Sensemaking uses language to develop meaning and direction, which allows executive leaders to conceptually frame circumstances. Through a related process called sensegiving, leaders use language and actions to help others understand and frame. Sensegiving is one way a leader impacts the outcomes of an organization by aligning the thinking and behavior of people and groups with that of the leader's meanings and intentions (Lord & Emrich, 2001; Narayanan et al., 2011; Rouleau, 2005).

Contemporary Health Care

The past two decades in health care have brought pressures and variables that accelerate change and compound the complexity experienced by organizations (Erwin, 2009). Complexity is described as situations or environments that are multivariable, volatile, uncertain, and ambiguous (Lees, 2017). In health care, complexity manifests as

rapid change (volatile), an inability to predict outcomes (uncertain), and a lack of clarity regarding the meaning or effects of events (ambiguous).

Although decades of research provide strategies for leading during complex circumstances, few health care organizations achieve consistent success and high-quality outcomes (Dinh et al., 2014, Erwin, 2009). Health care executives across the US report struggles with complexity. However, while complexity poses obvious practical and logistical challenges for leaders, the deeper implications of how complexity affects leaders and their leadership practice is poorly understood (Dinh et al., 2014, Erwin, 2009).

Peter Angood, MD, CEO, and president of the American Association for Physician Leadership says of health care, “We are an inherently complex industry and we shall always be complex, that’s just who we are. Any leaders need to accept this degree of complexity and the ambiguity that goes with it” (Zimlich, 2017, para. 1). However, recent changes add to the complexity and generate an urgency for organizations to radically modify their operations (Maillet, Lamarche, Roy, & Lemire, 2015; The National Commission on Physician Payment Reform [NCPPR], 2013). The primary drivers of change include rising patient and community needs, advances in best practice and technology, and health care reform, which intends to improve patient care and contain costs of the U.S. health care system.

Value and change drivers. The US has one of the highest healthcare expenditures of any country in the world yet provides quality of uneven value (NCPPR, 2013; Organisation for Economic Co-operation & Development [OECD], 2017). Even with the advantage of advanced medical technology, people in the US are not healthier,

life expectancy is not longer, nor health outcomes better than similar countries having lesser costs (Ridic, Gleason, & Ridic, 2012).

The NCPPR (2013) found the traditional *fee-for-service* model as the number one driver of high U.S. health care expenditures. In this model, organizations charge patients for each episode of acute illness or injury, or the exacerbation of a chronic illness (NCPPR, 2013). During these episodes, organizations also charge the patient a fee for individual services they receive. For instance, if a patient gets an exam, a medication, and a test, each service shows up separately yielding an expensive itemized bill. The payment model does not consider the outcomes of the patient's care, nor if each service was needed to diagnose and heal the patient.

The model lacks incentives and accountability for organizations to keep patients well or manage chronic illness in a cost-effective manner (Healthcare Financial Management Association [HFMA], 2011; NCPPR, 2013). Instead, the fee-for-service model incentivizes the opposite by encouraging more episodes and services. The resulting health care system lacks coordinated care between episodes and leads to poorly controlled chronic illness causing needs for more care.

The outdated structure exposes patients to time-intensive, sometimes painful or dangerous tests, potential complications, and added costs (NCPPR, 2013). The focus on episodic care and volume of services has created silos within many health care organizations. In many cases, each service has worked without regard other services received by patients. Technological systems and operational processes have not supported integrated patient information and continuity of care, leaving clinicians unable to approach care holistically without critical tools and knowledge to understand the

patient's story. Organizations have not been accountable for people's long-term health, so the infrastructure of health care has grown disconnected and redundant, further compounding costs and unfavorable long-term outcomes for patients (HFMA, 2011; NCPPR, 2013; Ridic et al., 2012; Schroeder & Frist, 2013).

In 2010, President Barack Obama and U.S. Congress passed the Affordable Care Act, which fundamentally changed healthcare reimbursement philosophy and began formal health care reform (HFMA, 2011; U.S. Department of Health & Human Services, 2015). Health care reform is a set of policies that hold organizations accountable for quality of care and costs, while providing more options for health insurance coverages for individuals. Instead of a fee-for-service reimbursement model, the law began a transition to a *value-based* model.

Value in health care is *quality* divided by *payment* (HFMA, 2011). In the equation, quality is defined as a compilation of patient safety, satisfaction, and health outcomes, while payment refers to the total cost of care to all payers. The value proposition holds organizations accountable for the care provided to patients, patient satisfaction with services, and the management of costs associated with care. By regulating reimbursement, the ACA has forced healthcare executives to restructure business to improve value, maintain fiscal viability, and efficiently carry out their missions (Centers for Medicare & Medicaid Services [CMS], 2013; Delmatoff & Lazarus, 2014; Erwin, 2009; HFMA, 2011; Maillet et al., 2015).

The momentum towards value is unlikely to change, even with President Donald Trump's promise to repeal the ACA entirely (Egan, 2017; HFMA, 2011; Maillet et al., 2015). Current legislation will eliminate mandated insurance coverage which will

increase up charity care and bad debt that is not paid. Mandatory public reporting of quality outcomes will drive market competition. Together, cost and quality will continue to be significant drivers for executive leaders to preserve bottom-line and market share. Value is also a principal factor in U.S. health care sustainability, so will remain a central consideration for future legislation and responsible healthcare leaders (Egan, 2017). Most importantly, value is a no-regret strategy that benefits patients and organizations alike.

The value transition has augmented the pace of change and applied new measures and accountabilities, guided by complicated rules and deadlines (Delmatoff & Lazarus, 2014). The stakes are high with reimbursement penalties, cuts, and caps looming. Most organizations have had limited preliminary success improving value leaving executive leaders struggling amidst the complexities to continue daily operations and make effective changes to improve value (Maillet et al., 2015; NCPPR, 2013).

Perspectives and imperatives of executive leaders. IBM's 2010 study of more than 1,500 chief executive officers (CEOs) revealed most believed creativity is the most crucial factor for success in the complex modern business environment. Eighty-percent think the environment will grow more complex. Over half believe their organization is not equipped to handle the change and, "seriously doubt their ability to cope with rapidly escalating complexity" (IBM, 2010).

John Halamka, MD, CIO of Beth Israel Deaconess Medical Center in Boston comments on the new regulations in health care, "are so overwhelmingly complex that no mere human will be able to understand them. As a practicing clinician for 30 years, I can honestly say that it's time to leave the profession if we stay on the current trajectory"

(Rosin & Rappleye, 2016, para. 21). Palo Alto County Health System CEO, Desiree Einsweiler, says, “I worry about how we are going to make the shift from volume to value...we have to change our thoughts and actions. Anyone who has ever tried to break a bad habit knows how difficult that can be” (Becker’s Hospital Review, 2015, para. 22). The two executives highlight the challenges of the environment, as well as the cognitive difficulties of understanding and coping with the changes. Their perceptions of the situation are that it is so volatile they question the ability to succeed or even continue in the field.

Executive leaders point out challenges with making sense of the environment while rationalizing the organization’s lack of progress in a poorly-defined change process. Deb Gage, president, and CEO of Medecision, likens the anxiety CEOs feel to teenage sex: “Everyone's talking about it, no one really knows how to do it. Everyone thinks everyone else is doing it, so we all say we're doing it” (Rosin & Rappleye, 2016 para. 17). Lynn Nicholas, president, and CEO of Massachusetts Hospital Association comments, “The biggest challenge is ensuring goals and incentives are aligned, [but] when you're in the middle of the transition, it gets very confusing” (Becker’s Hospital Review, 2015, para. 4).

Among the anxiety and confusion, operationalizing support structures to improve value also challenges executive leaders. The CEO of a Midwestern health system said his leadership team are “positioned well in our thinking” about the future but struggle to operationalize new technological infrastructures, data management systems, policy and process, and compensation structures (Merrild, 2015, para. 8). However, positioning operations during change is a major responsibility of executive leaders (Hambrick, 1984;

Rouse, 2008). So, even if leadership teams intellectually understand the requirements, effectively influencing operations to align efforts with goals requires a different level of understanding and action (Dinh et al., 2014; Porter-O'Grady & Malloch, 2015). Dr. A. Marc Harrison, CEO of Intermountain Healthcare describes the leadership acumen necessary for success as going beyond the typical managerial skills (Kacik, 2017, para. 9). Communication and leadership skills are essential, but more importantly, the executive needs to be a “thought-leader and influencer” during change (Kacik, 2017, para. 9).

Social justice and humanistic themes underpin the mission statements and the value-proposition in health care (Galea, 2016). Charles Sorenson, MD, former president, and CEO of Intermountain Healthcare, comments on the importance of self-reflection and finding connections to *purpose* as a means of enhancing resilience:

To the people who despair, who think their chosen profession is becoming too difficult and is failing, I disagree. We now have an unparalleled opportunity to make health care better for the people we serve and to make it better for the people who choose this noble profession. Each of you who are involved in health care have [sic] a demanding and stressful job. But when you go home, tired and spent and stressed out, ask yourself, 'What would I rather be doing?' What could be more worthwhile than caring for the thing others consider to be the most precious — their lives? (Rosin & Rappleye, 2016, para. 40)

Sorenson summarizes the desperation felt by many when trying to make sense of the complexity in health care. Einsweiler (2015) mentioned the need to “change our thoughts,” and Sorenson reframes the problem into an opportunity. Although Sorenson’s

sentiments do not offer a practical roadmap for success, he implies self-reflection and connection to values of social justice may provide the resilience necessary to solve the problems facing health care.

Complexity Science

Modern environments grow more complex for organizations every year (Burns, 2001; Maillet, Lamarche, Roy, & Lemire, 2015; Porter-O'Grady & Malloch, 2015; Senge, 1990; Zimmerman, Lindberg, & Plsek, 2001). In this context, complexity begins as a social dynamic spawned by the exponential growth of the interrelatedness and interconnectivity of people and related systems (Porter-O'Grady & Malloch, 2015). Drivers of the dynamic include faster modes of communication and easier access to information, both of which are rooted in rapidly changing technology.

Researchers have studied the phenomenon in multiple industries such as manufacturing, information technology, finance, education, and more (Erwin, 2009; Finkelstein & Hambrick, 1996; Krichbaum et al., 2007; Longenecker & Longenecker, 2014; Raaijmakers, Vermeulen, Meeus, & Zietsma, 2015; Zimmerman et al., 2001). The study of complexity is called *complexity science*. According to complexity science, complexity is unavoidable, natural, and similar in various settings (Burns, 2001; Zimmerman et al., 2001). Complexity is the unpredictable behavior of living systems characterized by chaotic, rapidly changing, nonlinear, and uncontrolled circumstances. (Burns, 2001; Zimmerman et al., 2001).

Health care organizations. Complexity science describes organizations as *complex adaptive systems* made up of several independent entities and systems that interact yielding unpredictable outcomes, naturally creating complexity (Burns, 2001). In

complex adaptive systems, informal groups emerge building patterns and structures that complement, compete with, or distort the purposefully designed structures of an organization, thereby impacting organizational goals and outcomes (Burns, 2001; Fabac, 2010).

Complex adaptive systems are composed of individuals driven by organizational and personal needs, rather than the rules of a system (Rouse, 2000). Individuals are not homogenous. They act as intelligent, independent agents with competing and conflicting goals, which cause fluctuating dynamics between and within people and groups. Therefore, complex adaptive systems do not reach a point of equilibrium (Rouse, 2000). As individuals learn and adapt, complex adaptive systems self-organize into behavior patterns that emerge organically rather than emerging from a structured system (Rouse, 2000). The results are unpredictable and range from desirable to undesirable. Leaders cannot control complex adaptive systems (Rouse, 2000). Instead, leaders can influence complex adaptive systems to improve performance.

In addition to external social, technological and regulatory changes, healthcare organizations are subject to departmental silos and cultural resistance to change that adds to the complexity (Huy et al., 2014; Maillet et al., 2015). Limited resources, including budget constraints and staffing issues, further compound complexity (Huy et al., 2014; Maillet et al., 2015). Executive leaders are forced to balance mounting expectations with dwindling resources; the case of “do more with less” (Ellison, 2015, para. 1).

The frontline. Frontline stakeholders in the organization, such as physicians and nurses that care for patients, are also affected by complexity (Krichbaum et al., 2007). The effects of complex adaptive systems, health care reform, and technology

advancement interject serious complications into the frontline clinical environment (Haugen & Rosenfeld, 2016; Krichbaum et al., 2007). The liabilities can interrupt, distract, and delay work. Complexity challenges clinicians in the coordination of care, meeting patient needs and threatens personal or patient safety by predisposing the clinician to errors (Krichbaum et al., 2007). Patients are also living longer with more serious illnesses as life-sustaining and saving technology improves, further complicating care. Meanwhile, attempts to improve value often add to the responsibilities of caretakers, which can contribute to a loss of quality and efficiency (Krichbaum et al., 2007).

Many physicians feel the complexity of the environment and efforts toward value has shifted attention away from patient care toward complicated logistics and reimbursement structures (Haugen & Rosenfeld, 2016, July 25). The shift in attention is potentially detrimental to patient care, which can contribute to a loss of value (Krichbaum et al., 2007). It is the executive leader's responsibility to address complexity by pulling away from clinicians and patients to manage it through intricate support processes and services (Rouse, 2008). Without understanding and fulfilling this responsibility, the executive leader threatens patient safety and value.

Executive leaders. Complexity science has implications for executive leaders as mechanistic systems of prediction and control lose efficacy in complex environments (Burns, 2001). Executive leaders must understand organizations as a group of individuals that adapt and self-organize in response to needs and circumstances, yet create nonlinear processes and unpredictable outcomes (Rouse, 2008). The executive must observe and attempt to correct for the interplay between and within environments as it produces

instability and volatility, often countering improvement efforts (Burns, 2001; Maillet et al., 2015; Zimmerman et al., 2001). Attempts to improve or simplify operational processes can paradoxically exacerbate the system yielding more unpredictable outcomes (Burns, 2001; Maillet et al., 2015; Zimmerman et al., 2001). For instance, improvement efforts like policy changes and technology implementation introduce unexpected changes and duties to nursing staff, which can predispose patients to errors and contributes to a loss of quality and efficiency (Krichbaum et al., 2007). This is partly due to the complexity it introduces at the frontline (Krichbaum et al., 2007). Framing improvement efforts through the lens of complexity, the leader can more effectively influence successful change (Rouse, 2008). However, the leader must first understand the environment, develop meaning, and then strategize, which is carried out through the leader's cognition.

Cognitive structures and processes impact how individuals view reality and help characterize a person's behaviors (Burns, 2001; Finkelstein & Hambrick, 1996; Huy et al., 2014; Porter-O'Grady & Malloch, 2015; Senge, 1990). The concept applies to executive leadership practices, which are behaviors driven by perceptions and reactions (Colbert, Barrick, & Bradley, 2014). For instance, fast-paced and complex work environments may push an executive to act reflexively as they quickly process complicated information through deeply ingrained, often unconscious beliefs (Finkelstein & Hambrick, 1996; Nadkarni & Herrmann, 2010; Senge, 1990; Zimmerman et al., 2001). When leaders intend to influence the organization toward a goal, they use cognitive and social processes to make sense of the environment, calibrate a direction, and act through their leadership practices (Weick et al., 2005).

Cognitive Science

Leaders have limited attentional resources (Hambrick & Mason, 1984). Events that receive attention are filtered through cognitive structures and processes. The phenomenon produces perception, awareness, and cognition that affect behaviors.

Cognitive science can aid in the understanding of the leader's internal processes as they make sense and interact with the world (Finkelstein & Hambrick, 1996).

Cognitive science is a broad field of study that includes, "psychology, artificial intelligence, linguistics, and philosophy in developing theories about human perception, thinking, and learning" (Merriam-Webster, 2018). The field overlaps social, political, and organizational sciences and some argue those sciences originate from cognitive science (Dinh et al., 2014; Porter-O'Grady & Malloch, 2015; Sun, 2012; Weick et al., 2005).

Similar or synonymous theories, concepts, and terms permeate the boundaries between fields with variability affected by the lens in which they are applied (Sun, 2012). Several related terms exist in the literature to describe cognitive structures and processes within the context or discipline from which they arose. Some terms originate from the study of cognitive science and psychology, while others from sociological or political theory. The terms are not used consistently over time nor between experts. The term concepts are so similar that in most cases they can be used interchangeably or with descriptions of their relatedness or differentiation within each context. This section provides a general overview of the concepts rather than detailed historical definitions. Other sections provide detail when appropriate to delineate nuances between terms.

Schemas, mental models, and frames. *Schemas* and *mental models* are knowledge structures that organize and relate information, channel thoughts, and influence behaviors (Lord & Emrich, 2001; Senge, 1990). Schemas represent aspects of reality and are unlikely to change for an individual once intact, even when experiences or information run counter to the schema (Nadkarni & Narayanan, 2007). Schemas assist an individual in automating the thinking process to quickly organize new perceptions and experiences. They are essential to the research as they are semi-rigid patterns of thinking that cause reflexive or habitual actions and affect how leaders make sense of things.

Schemas are similar in concept to Senge's (1990) *mental models* which develop as the individual interacts with the world and are often unconscious or semiconscious beliefs that regulate perceptions and responses. Mental models are simplified versions of more complex realities. Mental models are conceptualizations about oneself, relationships with and between things, and creates perceptions as one filters information through the model.

Mental models are flexible and can change over time (Johnson-Laird, 1983). They can cause selective perception, may not be consistently applied, and may not be accurate or helpful representations of reality (Johnson-Laird, 1983). *Mental model* is the preferred term of the researcher in this study, however, the terms *schema(s)* and *mental model(s)* are used interchangeably depending on the theoretical context from which they are referenced.

Klein et al. (2006b) describe a similar concept called *frames* that "function as a hypothesis about the connections among data." Incoming data challenge the hypothesis, which individuals then process consciously or unconsciously on a continuum of support-

reject or modify. Bolman and Deal (2013) describe a frame as a mental model. A more nuanced definition is that a frame is a schema or mental model *in action* as one encounters information (Klein et al., 2006b; Louis, 1980). Schema and mental models can help frame information, while information also shapes schema, mental models, and frames (Klein et al., 2006b). The dynamic shows the bidirectional influence the situational context has on the mental model and conversely the mental model has on the context. Together, the dynamic affects attitudes and behaviors, and all play a role in an individual makes sense.

Sensemaking. The theoretical process of filtering complex environmental inputs to assign meaning and make decisions is called *sensemaking* (Lord & Emrich, 2001; Narayana et al., 2011). The process relies on language, mental evaluation, mental models, reasoning, and problem-solving, and contributes to general cognition. Individuals and groups go through sensemaking to understand reality and meaning of events and environments (Lord & Emrich, 2001; Narayanan, Zane, & Kemmerer, 2011; Weick et al., 2005).

Sensemaking is an ongoing cognitive process (Weick et al., 2005). The process is sequential yet sometimes nonlinear and recursive. Sensemaking turns information into words to enable understanding, organization, and action (Weick et al., 2005). Sensemaking is often a swift and transient and uses mental models and framing to aid the process. It can be conscious, subconscious, or unconscious, and can take place with the assistance of social interaction and communication with others (Weick et al., 2005).

Sensemaking becomes more explicit in circumstances that create dissonance between one's expectations and the current state of the world (Weick et al., 2005).

Situations like these are referred to as *heat experiences*, which push an individual into elevated states of sensemaking (Petrie, 2015). Complexity is inherently difficult to understand and predict. This creates dissonance between expectations and the state of the environment leading to confusion, anxiety, ambiguity, unpreparedness, and despair (Burns, 2001; Lees, 2017; Petrie, 2015, Rouse, 2000; Weick et al., 2005). Rapid change also contributes to the need for conscious sensemaking as the individual attempts to reorient and recalibrate meaning, order, and positionality for action. Weick (1995) describes sensemaking as an ongoing experiential flow of interaction and interpretation, in search of answers to the question, “what's the story?” (Weick et al., 2005, p. 410).

Metacognition. The leader may use other abstract processes to assist the quality of their sensemaking and mental models. *Metacognition* is “thinking about thinking” (Chick, 2017, para. 1) and used to evaluate one’s understanding and performance. Awareness of one’s mental models and sensemaking processes allows for self-reflection. It creates a volley of cognitive reasoning, thereby improving the quality of sensemaking in the moment (Lord & Emrich, 2001). Metacognition assists the leader in improving their mental models as well. Metacognition includes activities like self-assessment and correction, monitoring skills, approach, and planning of problem-solving and learning, and evaluating progress towards goals. Lord and Emrich (2001) refer to this process as “extracting, regenerating, and refining schema,” to enhance the complexity and accuracy of their mental models. This allows the leader to adapt accordingly to maximize their understanding of environments and situations thereby improving the efficacy of their influence.

Sensegiving. A related process, called *sensegiving*, is one way the leader can influence others (Gioia & Chittipeddi, 1991). The action-oriented process links the sensemaking of the leader to the sensemaking of followers. Sensegiving is the art of using language and action to influence others' sensemaking processes as they construct their version of reality (Weick et al., 2005). Sensegiving is about helping others frame situations and circumstances (Gioia & Chittipeddi, 1991), which is an essential part of leadership and influence (Bolman & Deal, 2013). If sensemaking seeks to answer, "what's the story," then sensegiving is *telling the story* to others to bestow a shared understanding and meaning.

In the context of leadership, complex environments often act as a trigger for sensegiving since leaders must focus subordinates on what is important to reach organizational goals (Maitlis & Lawrence, 2007). Sensegiving is a process the leader uses to influence the way those in the organization think, toward a shared reality with the intention of eliciting certain behaviors they deem favorable (Weick et al., 2005). Through the lens of sensegiving, leadership is therefore about influence, not command and control (Weick et al., 2005). The idea relates to complex adaptive systems, which leaders cannot control because of complexity, but have influence over their behaviors and outcomes (Rouse, 2008). Sensegiving is especially crucial to leaders as they attempt to create shared meanings about the environment and align and influence the direction of efforts towards goals they wish to achieve (Weick et al., 2005).

Sensemaking, sensegiving, and complexity. Sensemaking not only becomes a conscious process within the context of complexity but also tends to take more time (Weick et al., 2005). Sensemaking in complex situations can also cause the leader to

encounter dissonant feelings, ambiguity, and ambivalence (Guarana & Hernandez, 2014). The leader can experience these uncomfortable feelings as they try to sort through their experiences and organize them within their existing schemas or mental models (Lord & Emrich, 2001; Narayanan et al., 2011). To avoid cognitive discomfort, individuals can avoid contextual interpretation (sensemaking and metacognition) and make quick, potentially volatile decisions (Conner & Armitage, 1998). If the leader cannot identify the discomfort or the reasons for it, they become more susceptible to the immediate context, the inclinations of their personality, and biased or incomplete schema and mental models, thereby impeding the quality of their sensemaking and resulting insight (Guarana & Hernandez, 2014; Lavine et al., 2000; Weick et al., 2005).

Emotional intelligence. Emotional intelligence can assist the leader's cognitive processing of their emotions and the emotions of others (Fernández-Berrocal & Checa, 2016). Emotional intelligence (EI) is usually approached in two ways: the mixed model (Goleman, 1995) and the ability model (Mayer et al., 1999). The mixed model views EI as a conglomerate of cognitive, personality, and behavior traits, with specific competencies that affect leadership practice (Fernández-Berrocal & Checa, 2016; Goleman, 1995). The ability model focuses on an individual's cognitive ability to assimilate internal and external emotional information to improve sensemaking and sensegiving (Fernández-Berrocal & Checa, 2016; Mayer et al., 1999).

Goleman (1995; 1998) popularized the mixed model in several bestsellers. The model has five component skills mediated by basic inborn traits. The components include *personal competence factors* of (a) self-awareness and (b) self-regulation; and *social competence factors* of (c) empathy and (d) relationships and social skills.

Competency mediators include recognition and regulation, while (5) motivation is an overall mediator for the model.

The Mayer et al. (2004) ability model ability model, sometimes referred to as the four-branch model, consists of four cognitive abilities that supplement sensemaking: (a) perceiving emotions, (b) using emotions, (c) understanding emotions, (d) managing emotions. First, emotions are perceived and expressed and begin to influence cognition. Second, sensemaking begins as the individual notices emotional signals that inform cognitive processes. Third, the individual compares emotional information against earlier knowledge and mental models to arrive at a meaningful understanding about the emotion and associated relationship(s). Fourth, thoughts about the emotional meanings guide the management of the emotions and provide a context for emotional and intellectual growth (Mayer et al., 2003).

Studies have also found a correlation between employee engagement and measures of EI of their supervisors, although correlations were only moderate and poorly understood (Suehs, 2015). However, there is strong intuitive agreement with EI concepts, and EI jargon permeates leadership language and culture (Daus & Ashkanasy, 2003; Mayer et al., 2003; Suehs, 2015). The EI models provide context for how executives use emotional information to inform sensemaking; therefore, EI and the associated theories are relevant to this qualitative study.

Background summary. The ways executive leaders sensemake and sensegive in complexity influences business operations, the willingness of employees to adapt, and organizational outcomes and value (Dinh et al., 2014; Hambrick, 1994; Huy et al., 2014). Complexity challenges the efforts of executives to maintain influence that generates or

supports intended outcomes for the organization (Dinh et al., 2014). Smerek (2009) rightly points out the obvious: that complexity is complicated, and organizations are not merely in or out of crisis. A confluence of variables creates unique situational demands that cause a “simultaneity of sensemaking and sensegiving” (p. 148) as a leader attempts to create “meaning and direction despite the specific context” (Smerek, 2009, p. 148). Through their sensemaking, executive leaders must assess external and internal complexity, predict and adapt to change, and attempt to maximize their influence within the environment through their sensegiving (Burns, 2001; Dinh et al., 2014; Hambrick, 1994; Huy, Corely, & Kraatz, 2014; Maillet et al., 2015; Weick et al., 2005; Zimmerman et al., 2001).

Problem Statement

The new focus on value, often referred to as health care reform, has applied significant pressures on organizations to become more accountable for patient care, outcomes, and use of resources (CMS, 2013). In addition to the inherent complexities associated with health care, the shift towards value has further complicated the environment leaving executive leaders confused, anxious, and struggling with the efficacy of their practice (Kacik, 2015; Rosin & Rappleye, 2016). Executive leaders often react by implementing changes in work tools, materials, policies, procedures and processes, documentation requirements, resources, and accountabilities (HFMA, 2011; Huy et al., 2014; Krichbaum et al., 2007). However, the efforts rarely have the intended effect due to several confounding factors that create confusion about how to proceed, lack of effective sensemaking and sensegiving, and the impact of complexity on the front line (Kacik, 2015; Krichbaum et al., 2007; O’Grady & Malloch, 2015; Rosin & Rappleye,

2016). Instead of radical changes and command and control management, some leadership theories have shifted toward understanding how to lead within complexity using influence (Dinh et al., 2014; Porter-O'Grady & Malloch, 2015).

Factors contributing to complexity in contemporary health care include increasingly complicated patients and populations, rapid technological and practice changes, organizational culture, and systems-challenges (HFMA, 2011; Huy, Corely, & Kraatz, 2014; Krichbaum et al., 2007). Executive leaders have a responsibility to make sense of and mitigate the negative aspects of complexity (Rouse, 2008). Without adequately addressing the issue, executive leaders risk noncompliance with regulations, inefficient and costly processes, and lack of reimbursement (HFMA, 2011; Rouse, 2008). Executive leaders also risk organizations becoming contributors to the American health care problem by feeding an unsustainable infrastructure. More importantly, complexity puts patients in deleterious financial situations, and at risk of clinical errors and sub-optimal health outcomes (Krichbaum et al., 2007; Rouse, 2008). Results such as these fail the community, the professionals at the front line, and in most cases, the mission of the organization.

Leaders interface with the external environment through processes such as sensemaking and sensegiving (Weick et al., 2005). Internal factors, such as schema and metacognition, contextualize the leader's thinking and self-reflection. The cognitive dynamics characterize their leadership practices, which are disproportionately influential and, therefore, necessary for organizational progress (Dinh et al., 2014; Hambrick, 1994). However, despite concentrated efforts, organizations continue to show inconsistent results which negatively impact patient outcomes and costs (Dinh et al., 2014; Hambrick,

1994). Leaders cite, and evidence supports complexity as a significant barrier to success (Dinh et al., 2014; Kacik, 2015; Rosin & Rappleye, 2016, Rouse, 2008). Therefore, healthcare executives must understand how to maximize their influence in a complex environment if they hope to improve value (Dinh et al., 2014; Hambrick, 1994; Rouse, 2008).

Theoretical Rationale

The theoretical constructs of complexity science and cognitive science are used to explain the context of the study and as a foundational framework for how leaders make sense of the environment and rationalize how to act within it. Complexity science and its effects on leadership and organizations are thoroughly studied (Erwin, 2009; Finkelstein & Hambrick, 1996; Krichbaum et al., 2007; Longenecker & Longenecker, 2014; Raaijmakers, Vermeulen, Meeus, & Zietsma, 2015; Zimmerman et al., 2001).

Synthesis of the research yields themes considered as general principles, yet no unifying theory of leadership exists because of complexity's inconsistent and unpredictable outcomes with differing environments and individuals (Dinh et al., 2014). In the context of increasing complexity, traditional leadership theories of cause-and-effect and command-and-control lose their relevance. Traditional theories do not sufficiently consider changing environmental contexts and temporal dynamics existing within individuals, teams, and social systems (Dinh et al., 2014; Porter-O'Grady & Malloch, 2015; Nadkarni & Chen, 2014). On a deeper level, traditional theories do not consider the leader's internal response and processing within complex contexts and the effects on leadership practices (Dinh et al., 2014).

Quantum leadership theory. Modern leadership theories, based on complexity science, began to address complexity phenomena directly in the 1990s (Zimmerman et al., 2001). More recently, quantum leadership theory built upon the concepts to address specific issues that healthcare organizations face today (Porter-O'Grady & Malloch, 2015). The theory breaks ties with Newtonian science, which focuses on controlling variables to create predictable outcomes, and embraces quantum science. Quantum concepts include accepting uncertainty while cultivating relationships and synergies between complex adaptive systems, embracing nonlinear processes, and emergent order and leadership to enable probable outcomes (Porter-O'Grady & Malloch, 2015).

Quantum leadership synthesizes concepts of complexity and cognitive sciences explaining that the leader must first understand the characteristics of complexity and then harness it by responding, learning, and adapting. Taking cues from transformation and servant leadership theories, the leader seeks to transform the organization through relationships and communication, firmly grounded in integrity, resilience, creativity, and service to the mission and the people of the organization (Gülcan, 2015; Porter-O'Grady & Malloch, 2015). Central to quantum leadership theory is the leader's ability to self-reflect and continuously develop their understanding and perceptions of the world. Quantum leadership theory differs from transformational leadership in that it is nonlinear and allows direction to emerge from complexity, which is then reconciled with the leader's vision and the organization's direction. Complexity becomes an integral part of the construction of organizational reality and how the leader attempts to influence (Porter-O'Grady & Malloch, 2015).

The role of the leader in quantum leadership shifts from structure and control to nurturing empowerment, innovation, and decision-making at the level of service (Porter-O'Grady & Malloch, 2015). The leader becomes secondary to collaboration and ground-up innovation. A primary role of the leader includes creating environments where collaboration can occur, encouraging innovation that improves value, and providing resources and infrastructure to integrate innovations into the organization's operations (Porter-O'Grady & Malloch, 2015).

However, even contemporary theories considering complexity like Porter O'Grady and Malloch's (2015) quantum leadership theory, do not sufficiently explain the internal processes of leaders trying to maximize their influence in the real world. Quantum leadership theory provides strategies for viewing and handling complexity, yet the theory does not serve as a framework to understand the executive leader's experience or explain their leadership processes in health care today.

Researchers have studied leaders' cognitive factors such as mental models, sensemaking and sensegiving, metacognition, and others. However, most studies focus on leadership theory, outcomes, and static behaviors or strategy, rather than the interplay of complexity and the internal processes of the leader as they attempt to maximize their influence. Therefore, this grounded theory study looks to cultivate a deeper theoretical explanation of the phenomenon.

Statement of Purpose

The purpose of this study was to explore the real-world perceptions, processes, and challenges that occur within executive leaders as they attempt to make sense of a complex healthcare environment (sensemaking). The study explored how insight

emerges for executive leaders attempting to maximize their influence (sensegiving). In this context, quality of sensemaking and sensegiving, and the leader's ability to "maximize" influence judged by the executive leader's evaluation of how well they were able to influence the current situation toward their intended outcome. Understanding the real-world relationship could clarify deeper challenges and new phenomena that enable leaders to maximize their influence.

The study further develops the theoretical potential of executive leader sensemaking and sensegiving in complex health care. The study seeks to empower executive leaders with additional knowledge to improve their self-awareness, metacognitive processes, and processes of "extracting, regenerating, and refining schema." Improving these processes can improve sensemaking and sensegiving, making the leader a stronger influencer within the organization and positioning for greater efficacy in the face of complexity (Lord & Emrich, 2001; Narayanan et al., 2011; Weick et al., 2005).

Research Questions

1. What perceptions occur within executive leaders during sensemaking in a complex, real-world healthcare environment?
2. What cognitive processes occur within executive leaders during sensemaking in a complex, real-world healthcare environment?
3. What do executive leaders consider when attempting to maximize their sensegiving influences in complex circumstances?
4. How do executive leaders attempt to maximize their sensegiving influences in complex circumstances?

Potential Significance of the Study

The issues associated with the fee-for-service model are significant since most U.S. citizens will need health care at some point in their lives and are subject to potentially limitless costs of care and sub-optimal health outcomes (HFMA, 2011; Ridic et al., 2012). Lack of regard for value also causes the inflation of federal and private insurance costs. The current system cannot sustain affordable quality care for U.S. citizens (NCPPIR, 2013). In the extreme, the broken system leads to crippling financial situations, and worse, patient harm or even death.

The issue is also significant to executive leaders of large healthcare systems as they attempt to influence health care reform and value in their organizations (Maillet et al., 2015). Executive leaders influence organizations through their leadership practices (Dinh et al., 2014; Hambrick, 1994). An executive's decisions, strategies, and approaches contextualize the work environment making their influence disproportionate within the organization (Burns, 2001; Finkelstein & Hambrick, 1996; Huy, Corley, & Kraatz, 2014; Longenecker & Longenecker, 2014; Raaijmakers, Vermeulen, Meeus, & Zietsma, 2015). Having such influence makes an executive's role critical to organizational culture and outcomes (Hambrick, 1994).

However, trying to identify a standard framework or practice that produces repeatable outcomes has proved to be inadequate in complex, real-world settings (Dinh et al., 2014; Porter O'Grady & Malloch, 2015; Senge, 1990). Understanding the dynamic between complexity and cognitive processes could enhance the executive leader's ability to personally cope with complexity and prepare the organization to manage it more

effectively. Furthermore, strengthening the processes could reduce complexity at the frontline where it threatens patient safety and value.

Definitions of Terms

Complexity: A broad term referring to a chaotic state with multiple variables, rapid change, and unpredictable outcomes. In organizations, complexity is characterized by variables such as external forces, individuals and groups, and systems like policies, processes, and technology (Burns, 2001; Fabac, 2010; Rouse, 2000). Complexity has always been common in health care, yet value reform has exacerbated the phenomenon. The paradigm changes in the fundamental underpinnings of patient care and business force organizations to restructure their operations to align with the new value model.

Complex adaptive systems: Dynamic systems consisting of several independent entities and systems that interact yielding unpredictable outcomes, naturally creating complexity (Burns, 2001). Complex adaptive systems self-organize, yet do not naturally reach a point of equilibrium since individuals are motivated by personal and organizational needs, rather than the rules of a system. They form a volatile dynamic and therefore cannot be controlled, yet leaders can influence the behaviors of complex adaptive systems and their outcomes (Rouse, 2000).

Dissonance: A state or experience characterized by incongruence between one's expectations and the state of the environment. Complexity is inherently difficult to understand and predict, and therefore creates dissonance between expectations and the state of the environment which can cause confusion, anxiety, dissonance, ambiguity, unpreparedness, and despair (Burns, 2001; Lees, 2017; Petrie, 2015, Rouse, 2000; Weick et al., 2005).

Emotional intelligence: The capacity to notice, perceive, interpret, manage, and use one's emotions to assist their thinking, and interact socially in an empathetic and productive way (Goleman, 1999; Mayer et al., 2003).

Executive leader: An executive is a person appointed and given the responsibility to manage the affairs of the organization and the authority to make decisions within specified boundaries (BusinessDictionary, 2018). Executives usually are usually first in the hierarchical order of an organization or service (Porter-O'Grady and Malloch, 2015). Executives historically had command-and-control type power in organizations, yet in growing complexity, leadership through influence and inspiration has become more important.

The frontline: Frontline clinicians, physicians, nurses, staff, are terms referring to individuals that provide or support direct patient care (Porter-O'Grady & Malloch, 2015). The frontline carry out the mission of the organization, otherwise known as the *point of service*. Frontline staff are typically the last in the hierarchical order of organizations, yet often have the greatest perspective on processes affecting patient care.

Health care reform: The Affordable Care Act (ACA) became federal law in 2010 and includes rules that fundamentally change the way organizations are paid for patient care (HFMA, 2011). The two models of reimbursement are the historic, based on *volume*, and the proposed based on *value*. Typically, organizations receive reimbursement for care provided from Medicare and Medicaid based on the *volume* of work or number of services they provide to the patient. The shift toward *value* means organizations are reimbursed or penalized financially based on the quality and cost-effectiveness of patient care. Although simple in concept, the ACA (2010) forces health

care organizations to change their entire business model, affecting patients, clinicians, technology, and revenue (CMS, 2013; Delmatoff & Lazarus, 2014; Erwin, 2009; HFMA, 2011; Maillet et al., 2015).

Heat experience: A situation that creates dissonance between one's expectations and the current state of the world (Weick et al., 2005). Heat experiences initiate an elevated state of sensemaking (Petrie, 2015).

Intended/unintended outcomes: Desirable or undesirable outcomes of influence, as judged by the leader. Rarely binary, outcomes are usually on a continuum with gradated or mixed results and halo results. In the absence of explicit leader judgments, the researcher judged intended/unintended outcomes using the leader's stated vision and other contextual elements that indicate alignment with the leader's and organization's intentions.

Maximized Influence: A sensegiving outcome judged by the leader as having the desired effect to the greatest extent possible, considering all variables.

Mental models (also schema): Cognitive structures based on conceptual assumptions and generalizations about the world that develop through learning and experience (Senge, 1990). Mental models allow individuals to quickly process information by comparing and filtering it with our knowledge and providing a sense of the circumstances. The individual is then able to act on the understanding that emerges through the process (Senge, 1990). Mental models are part of sensemaking and sensegiving, as an individual uses their mental models to frame information and make sense of the circumstances through comparisons to the models (Lord & Emrich, 2001; Senge, 1990; Weick et al., 1995).

Quality outcomes: A broad term referring to the results of patient care. Quality outcomes include several metrics the federal government defines as measures of the quality of care the patient received from an organization, including outcomes related to patient health, safety, and satisfaction (HFMA, 2011).

Sensegiving: Sensegiving is the art of using language and action to influence others' sensemaking processes as they construct their version of reality (Weick et al., 2005).

Sensemaking: The process of filtering complex environmental inputs to assign meaning and make decisions (Lord & Emrich, 2001; Narayana et al., 2011). The process is assisted by language, mental evaluation, mental models, reasoning, and problem-solving, and contributes substantially to general cognition.

Sensesight: Sensesight is the experience of ideas, insight, or intuition that emerge from sensemaking about sensegiving during a complex situational demand. The insight must inform leadership sensegiving practice and maximize influence.

Value: According to the ACA (2010), value is an equation in health care: $quality \div payment = value$ (HFMA, 2011). *Quality* is considered a compilation of patient safety, patient satisfaction, and health outcomes, while *payment* refers to the total cost of patient care to all payers. Payment for patient care based on value means organizations will no longer be paid for a list of services they provided to patients, rather, organizations will be reimbursed based on how cost-effective patient care was managed and patient health outcomes.

Volume/fee-for-service model: Historically, reimbursement to health care organizations by insurance and federal agencies for patient care is an itemized list of

services and related charges. For instance, if a patient has a blood test or a medication, the organization provided the care charges a fee for the services. All services rendered are charged to patients in this manner, yet the model drives up health care costs and encourages more services, rather than managing the health outcomes of the patient ([CMS], 2013; Delmatoff & Lazarus, 2014; Erwin, 2009; HFMA, 2011; Maillet et al., 2015).

Chapter Summary

Complexity and pace of change have grown in health care over the past 20 years and leadership practices have been challenged with inconsistent results. Beyond logistical concerns, complexity poses cognitive hurdles for the executive leader, both in understanding the healthcare landscape, as well as understanding how best to approach sensegiving. The issue is significant as the reimbursement paradigm shifts, and executives handle transforming their operations to improve value to patients.

The literature addresses factors including environmental complexity, cognitive processes of the leader, and leadership practices. However, empirical studies are missing about the dynamic between environmental complexity and the leader's insights regarding how to maximize their influence in a complex environment. This qualitative grounded theory study was conducted to examine central questions on the topic. Examining this perspective could provide traction for executive leaders attempting to make sense, adapt, and act as effectively as possible to influence the organization toward the goal of improving value to those in need.

The remainder of the dissertation is divided into five chapters. Chapter 2 synthesizes literature relevant to complexity science and cognitive science. Empirical

research on the interplay between complexity and cognitive constructs, leadership practice and impact on organizations is also discussed. A detailed rationale and explanation of the study design and implementation are provided in Chapter 3. Chapter 4 contains data analysis, findings, and interpretations and finally, Chapter 5 address the implications for the field and practice.

Chapter 2: Review of the Literature

Introduction and Purpose

The review of the literature provides a summary of empirical literature regarding environmental factors that contribute to complexity and the effects on leaders, organizations, and outcomes. Next, factors within the leader related to their sensemaking and leadership practices are addressed, and the dynamic between complexity and the internal world of the leader is explored. Finally, a synthesis of findings and themes lends insight into current knowledge in the field and opportunities for further study. Terms used to refer to complexity and cognitive phenomena in the literature vary and often have similar or related meanings. For the literature review, terms are referred to as they exist in studies, and when necessary, distinctions and connections are defined.

Complexity Science

For the literature review, the complexity science grouping will include variables that contribute to environmental complexity. Studies regarding the pace of change, politics, community needs, and competition, social climate, and organizational culture and operations are included to provide a rich understanding of the environment from an empirical standpoint (Brown & Eisenhardt, 1997; Collyer, 2017; Huy et al., 2014; Krichbaum et al., 2007; Longenecker & Longenecker, 2014; Mascia, Russo, & Morandi, 2015; Young-Hyman, 2017). The healthcare environment is increasingly complex which can impede improvement efforts (Brown & Eisenhardt, 1997; Collyer, 2017; Krichbaum et al., 2007; Longenecker & Longenecker, 2014; Young-Hyman, 2017).

A high-quality study conducted by Longenecker and Longenecker (2014) at four nonprofit hospitals, examined the perceptions of frontline leaders regarding why improvement efforts fail. The study design and data validation were rigorous with findings reviewed for agreement by a panel of three expert organizational development professionals. Ten key barriers to organizational improvement were identified in 42 focus groups composed of 167 leaders. Significant barriers to improvement include poor processes and planning, and limited buy-in and trust in executive leadership (Longenecker & Longenecker, 2014).

Collyer's (2017) complements Longenecker and Longenecker's (2014) when interviews of experienced leaders revealed strategies to address similar barriers associated with complexity. Themes from the international study indicate structured approaches for creating a goal-oriented environment, timely and accurate communication, and flexible leadership and rapid decision-making, have been helpful in dynamic environments (Collyer, 2017). Collyer's (2017) study was broad and took special measures to triangulate and validate findings. Together, Longenecker and Longenecker's (2014) and Collyer's findings support complexity as an organizational phenomenon that creates definable barriers to improvement needing specific strategies to overcome.

Similar themes developed in another study that examined complexity in the frontline nursing environment (Krichbaum et al., 2007). Although the study did not focus on improvement, it explored complexity variables that impede nurses from fulfilling job duties. Like Longenecker and Longenecker (2014) and Collyer (2017), Krichbaum (2007) found poor planning (sensemaking) and poor processes affect outcomes and

impact value by acting as barriers to efficient patient care and even predisposing nursing to errors. Krichbaum's (2007) study expands the evidence by making complexity's impact on outcomes tangible at the point of service. Krichbaum (2007), like Longenecker and Longenecker (2014) found poor planning and poor processes contribute to complexity and undermine improvement efforts. The conclusion is significant because planning and process development are major roles of executive leaders.

Brown and Eisenhardt (1997) and Young-Hyman (2017) compared successful and less-successful organizations in environments of high complexity and rapid change. Brown and Eisenhardt (1997) interviewed leadership at all levels in nine largescale international IT organizations. Successful organizations in complex environments had rapid multidirectional communication and open structures with clear responsibilities and priorities.

Young-Hyman (2017) echoed the results finding cross-functional communication between teams and clear power channels were key variables in productivity. Both Brown and Eisenhardt (1997) and Young-Hyman (2017) found labor productivity was higher in structures with clear responsibilities and concentrated formal power, rather than distributed power. Young-Hyman (2017) also asserts distributed power models have a negative impact on productivity in comparison to formal power, even though the findings do not fully support this claim.

Careful interpretation of Young-Hyman's (2017) study reveals when complexity was low, distributed power showed higher productivity than concentrated power. As complexity increased, concentrated power showed an increase in productivity, while the distributed model showed a decrease. However, productivity was not statistically

different with either model in high levels of complexity. The findings support distributed power as having higher overall productivity and that complexity challenges both concentrated and distributed power models, although the researcher did not discuss this as a conclusion of the study.

Young-Hyman (2017) found evidence that distributed power may create more conflict taking more time to resolve and offered this as an explanation for moderate productivity levels in complex environments. However, Young-Hyman (2017) did not address the quality of the outcomes. Other experts explain that conflict is often a crucial factor in arriving at better quality strategic decisions, team collaboration, and outcomes (Carmeli, Tishler, & Edmondson, 2011). Strategic decisions around power structures are a responsibility of the leader, which would require sensemaking. Although productivity is an essential factor, executive leaders in health care must also consider quality to improve value.

Collyer's (2017), Brown and Eisenhardt's (1997), and Young-Hyman's (2017) studies were not conducted in healthcare settings, so this is a potential limitation to applicability for the study. However, the phenomenon of complexity is defined similarly across industries characterized by uncertainty and unpredictability with multiple dynamic variables and high velocity change (Brown & Eisenhardt, 1997; Collyer, 2017; Huy et al., 2014; Krichbaum et al., 2007; Longenecker & Longenecker, 2014; Mascia et al., 2015; Young-Hyman, 2017). The literature also supports similar symptoms of complexity across industries such as poor communication, planning challenges, confusion and overwhelm, with impacts on productivity and outcomes (Brown & Eisenhardt, 1997; Collyer, 2017; Krichbaum et al., 2007; Longenecker & Longenecker, 2014; Young-

Hyman, 2017). Therefore, the studies are valuable and applicable to the phenomenon of interest as they expose leadership challenges associated with complexity and inform the study context.

In health care, complexity directly affects patient care, which can impact the organization's mission and the value it provides the community (Krichbaum et al., 2007). Executive leaders are responsible for improving value and must respond to and manage complexity for the organization and clinicians carrying out the mission (Dinh et al., 2014; Porter-O'Grady & Malloch, 2015; Rouse, 2008). Executive leaders do this through their leadership practices, which are mediated by their internal worlds (Dinh et al., 2014; Hambrick, 1994), yet the complexity of environmental inputs affects how individuals process internally (Lord & Emrich, 2001; Narayanan, Zane, & Kemmerer, 2011). The synthesis of findings suggests that leaders are affected internally by the phenomenon they are attempting to manage, which implies a potential interference loop may exist that challenges the leader not only from a strategic standpoint but a psychological perspective as well.

Cognitive Science

Factors affecting executives' cognitive processes and leadership practices have been studied internationally (Agel, Michell, & Sonnenfeld, 1999; Burns, 2001; Finkelstein & Hambrick, 1996; Hambrick; 1994; Higgs & Rowland, 2010; Kaplan, Klebanov, & Sorenson, 2012; Mascia, Russo, & Morandi, 2015; Nadkarni & Chen, 2014; Nadkarni & Herrmann, 2010; Narayanan, Zane, & Kemmerer, 2011; Peterson, Smith, Matorana, & Owens, 2003; Raaijmakers et al., 2015). Terms in the literature are

variable, but the concepts presented in the literature review are related to or influencers of sensemaking, sensegiving, metacognition, and mental models/schemas.

The dynamics between external stimuli, sensemaking, and leadership practices are not linear, nor unidirectional (Hambrick, 1994; Senge, 1990). Instead, the process is multivariable, bidirectional, recursive, and cyclical. Given the complicated nature and span of the phenomenon, it is inherently difficult to study, and therefore the literature is segmented and focused on supportive processes, precursors, sub-processes, and sub-dynamics (Dinh et al., 2014). Several studies examine the impact of environmental complexity on leaders' internal sensemaking, and the influence the dynamic has on decision-making and behaviors (Burns, 2001; Higgs & Rowland, 2010; Mascia, Russo, & Morandi, 2015; Nadkarni & Chen, 2014; Narayanan et al., 2011; Raaijmakers et al., 2015).

A study in the Netherlands with a high-quality design, used hypothetical scenarios and found leaders delayed compliance with external mandates in high complexity environments (Raaijmakers et al., 2015). However, leaders' perceptions of support from customers or employees mediated the findings, such that the organization complied faster when the leader felt supported (Raaijmakers et al., 2015). The mediating effect stakeholder support had on leaders' compliance in complex environments has significance related to health care reform, complexity, and the speed at which leaders become compliant with mandated change.

Two more extensive studies, both high-quality due to their rigorous design, triangulation, and validation, examined the effect of external factors on the cognitive structures of CEOs and their outcomes (McClellan, Liang, & Vincent, 2010; Nadkarni &

Chen, 2014). Nadkarni & Chen (2014) found the way CEOs perceive and assign meaning to past, present, and future events affects the rate of new product development. Complexity of the environment mediated productivity like Young-Hyman's (2017) study. Product development was high in stable environments when the CEO had high past, high present, and low future temporal focus, and conversely, in high complexity environments, product development was high when CEOs had low past, high present, and high future temporal focus (Nadkarni & Chen, 2014).

McClellan et al. (2010) looked at CEO commitment to the status quo in low and high-discretion industries. The level of leadership discretion correlated with a CEO's commitment to status quo; in low discretion industries, CEO commitment to status quo tended to be higher, yet high discretion industries did not show a statistical correlation with CEO commitment to status quo (McClellan et al., 2010). However, high discretion industries saw performance deteriorate over time when the CEO had a high commitment to the status quo (McClellan et al., 2010). Synthesis reveals executive perceptions and their choice of focus impact their influence productivity. The effects differ in varying levels of complexity and therefore have relevance to the study.

Environmental factors influenced CEO sensemaking in the studies outlined in this section (McClellan, Liang, & Vincent, 2010; Nadkarni & Chen, 2014; Raajimakers et al., 2015). Evidence suggests environmental factors like complexity and dynamism, level of leadership discretion, and power distribution structures are variables that affect a leader's internal processes. Internal factors like the perception of support, temporal focus, and commitment to status quo are critical factors in leaders' sensemaking processes and ultimately affect the leader's influence on organizational outcomes. Additional literature

explores how the leader's internal world affects their sensemaking and leadership practice and how the dynamic affects organizational outcomes.

Internal factors and leadership practice. Several aspects of the leader's internal world affect their leadership practices. The literature provides evidence for ways intuition, self-awareness, perceptions, mental models and other internal factors impact the leader (Burns, 2001; Colbert et al., 2014; Higgs & Rowland, 2010; Kaplan et al., 2012; Kish-Gephart & Campbell, 2015; Nadkarni & Herrmann; 2010; Peterson, Smith, Martorana, & Owens, 2003). The dynamic between internal factors and sensemaking influences leadership practices as the leader attempts to give context, meaning, and direction for employees through sensegiving (Lord & Emrich, 2001; Narayanan et al., 2011). This section synthesizes evidence from several studies to describe the dynamics between internal factors, sensemaking, and leadership practice.

A large, high-quality study conducted at three hospitals in San Diego explored nine theoretical principles of complexity leadership in a real-world setting (Burns, 2001). The study is included in the internal category because it investigates how leaders' internal cognitive structures connect with contemporary leadership strategies and practices. Burns (2001) assessed leaders' intuitive agreement with specific strategies for dealing with complexity and perceived usefulness.

The research was strong and thorough with careful sampling, validation through triangulation of data, and extensive development of the survey tool, so the findings likely represent leaders' true perceptions of each principle. The researchers found high intuitive support for viewing the environment through a lens of complexity, allowing systems to emerge out of complex dynamics, and balancing information flow. There was lower

intuitive support for planning with minimal detail and specifications, and for allowing strategic direction to arise from complex dynamics (Burns, 2001).

The Burns (2001) study supports findings from Longenecker and Longenecker (2014) and Collyer (2017) that looked at barriers to change and leadership in complex environments. The Burns (2001) study differs in that it inspects leaders' natural dispositions against similar barriers and strategies in the other studies. Kish-Gephart and Campbell (2015) conducted a very high quality rigorously controlled study of S&P1500 international CEOs (265 total). The study found that CEOs' perception of their social-class background impacted their risk-taking leadership behaviors (Kish-Gephart & Campbell, 2015). Perceptions of high social-class and perceptions of low social-class correlated with high risk-taking, while the middle class did not correlate to risk-taking (Kish-Gephart & Campbell, 2015). A relationship may exist between these findings and Peterson et al. (2003) that correlated CEO openness and top management team risk-taking.

Higgs and Rowland (2010) conducted a qualitative study on 33 CEOs in the United Kingdom, although the researchers did not describe the sampling process. The study looked at leadership practices and barriers in complex environments when implementing change. Higgs and Rowland (2010) focused on the leaders' self-awareness, a metacognitive function. The study seeks a deeper understanding of the leader's internal processes as opposed to Longenecker and Longenecker's (2014) and Collyer's (2017) examination of environmental-practice dynamics, Kish-Gephart and Campbell's (2015) perceptions of social class and Burns (2001) concept of intuitive agreement with strategies.

Themes in the Higgs and Rowland (2010) study supported findings from the other studies including setting clear expectations and roles (Brown & Eisenhardt, 1997; Burns, 2001; Collyer, 2017; Longenecker & Longenecker, 2014) and breaking status quo in complex environments (McClellan et al., 2010). The study also found key archetypal ego traps, like assuming the role of “hero” and “martyr” that decreased self-awareness and affect leadership behaviors negatively when dealing with barriers (Higgs & Rowland, 2010).

Kaplan et al. (2012) conducted a study of CEO candidates and their associated outcomes 1 year later. The researchers assessed several CEO characteristics and their impact on organizational success (Kaplan, 2012). The study used special controls and validation methods to improve credibility. Organizational performance correlated more strongly with resoluteness and execution skills than with interpersonal and team-related skills (Kaplan, 2012). The evidence supports findings by Colbert et al. (2014) and Judge et al. (2002) that showed task-based skills correlate more strongly with organizational effectiveness than interpersonal skills. CEO optimism and overconfidence played a crucial role in organizational success in this study, which supports Peterson et al. (2003) who found optimism correlated positively with organizational outcomes.

These studies focused on internal variables demonstrate how intuition, self-awareness, perceptions, and mental models influence leader processing and practice. The studies that considered complexity mainly looked at leader outputs, rather than leader processing. The background framed the grounded theory study as it examines similar processes within the participant pool.

Sensemaking and sensegiving. Weick (1993) provides a case study about a major forest-fire disaster that resulted in the death of 13 men. Weick (1993) found that role structure and practice routines were important parts of how individuals make sense. In unusual circumstances, such as emergencies, sensemaking can break down as roles and routines no longer serve their purpose. Meaning can easily be lost in these situations as the ongoing accomplishment of intersubjective reality-building begins to unravel.

In the fire disaster, initial reports prepped the firefighters with information that the fire was small and controllable (Weick, 1993). Many of the men proceeded as such, yet the fire was not acting small. Too much time passed, and the fire grew out of control. When the foreman lights another fire to cut off the existing fire, the men are confused because it blocks their only path out. Sense and meaning are lost when the foreman orders the men to continue fighting the fire, but the second-in-command abandons the party. The roles the men play and the command structure dissolve as the fire becomes the dominating force.

Weick (1993) purports that individuals in this fire disaster were not experiencing an objective reality but immersed in a shared reality. Their leader engaged in commands that made no sense, yet they were unable to sustain a shared, socially-constructed reality and common sense of what was happening. The men were unable to validate their impressions as the flames and smoke overwhelmed. Their belief of a small fire caused them to hesitate even when their senses indicated the fire was larger. Their leader's actions and commands, while not making sense, were influential in their decisions to stay. Most of the men died, even though there had been enough time and several opportunities to get out (Weick, 1993).

Maitlis (2005) conducted a longitudinal study about organizational sensemaking that revealed the dynamics between the leader, individuals, and groups in the organization. The author studied three separate complex musical orchestras and found that organizational sensemaking is gradated and mediated by sensegiving factors. The study findings were organized into a matrix juxtaposing high and low variables of leader sensegiving and stakeholder sensegiving (Maitlis, 2005).

The findings yielded four quadrants that characterize organizational sensemaking as follows: guided organizational sensemaking, when both leader and stakeholder sensegiving was high quality; restricted organizational sensemaking, when leader sensegiving was high and stakeholder sensegiving was low; fragmented organizational sensemaking, when leader sensegiving was low and stakeholder sensegiving was high; and minimal organizational sensemaking, when both leader and stakeholder sensegiving were low quality (Maitlis, 2005). The study explains the impact of leader and stakeholder sensegiving on global sensemaking within the orchestras and has applicability to the grounded theory study by providing information on the influence of sensegiving-sensemaking dynamics.

To simplify the understanding of sensemaking, Louis (1980) created a linear model based on an extensive metasynthesis of literature that outlines the major inputs and cognitive activities of the sensemaking process. Beginning the sensemaking cascade, an individual detects a change, contrast, and/or surprise that causes dissonance between what is expected and what is happening (Louis, 1980). The dissonance leads them to diagnose and interpret the situation (Louis, 1980).

Diagnoses and interpretation occur cognitively and socially amidst the leader's mental models, past experiences, predispositions, local interpretive schemas, and others' interpretations. At this time, meaning is attributed to the situation yielding updated expectations and possibly a behavioral response (Louis, 1980; Smerek, 2009). Louis' (1980) model is limited because sensemaking is not linear or sequential (Smerek, 2009), but the model is valuable in the completeness in descriptions of significant contributors to sensemaking.

Gioia and Chittipeddi (1991) conducted seminal research on the interrelation of sensemaking and sensegiving through an ethnographic study of CEOs as they initiated a strategic change. Four key phases were found in the study: *envisioning*, when the leader, through sensemaking, assesses and envisions possibilities; *signaling*, when the leader uses sensegiving to signal to the organization that change is imminent, intentionally introducing ambiguity and dissonance into the organization; *re-visioning*, when the organization begins sensemaking in response to determine meaning of the changes; and *energizing*, when the changes are rolled out through a compromise of activities (Gioia & Chittipeddi, 1991). The phases were well defined with associated timeframes and focused primarily on the role of sensegiving in organizational change. Sensemaking in this study was a secondary focus and therefore somewhat one-dimensional.

Rouleau (2005) studied how middle managers sensemake and sensegive related to organizational strategy in real life circumstances. The study analyzed managers' practices and routines rooted in their tacit knowledge that allow them to act as interpreters and sellers of strategic change. Middle managers used micro-practices that produce and reproduce links from the current moment to the organization's strategy. The

study described how middle managers play a critical role in a cascade of sensemaking and sensegiving through the organization.

Weick (1995) elaborates on the sensemaking process in terms of seven properties, based on his previous research on sensemaking (Weick, 1964; 1977; 1989; 1993). The properties act as influencers in the sensemaking process, no one dominant. The properties have different influence, in different contexts, at different times, and for different people.

The seven properties of sensemaking as described by Weick (1995) are (a) *social context* – meanings created through conversations, relationships, or individual deliberations of other's perspectives; (b) *personal identity* – one's personal perceptions, cognitive structures and processes; (c) *retrospect* – how one interprets and assigns meaning to past events; (d) *salient cues* – identifying a relationship between present moments and past experiences, which creates meaning; (e) *ongoing* – the cognitive response to an ongoing and evolving flow of experiences by breaking it into moments through bracketing, detecting cues, and assigning meaning; (f) *plausibility* – builds upon social context, retrospect, and salient cues to determine a credible story that reduces cognitive dissonance created by situational ambiguity; a “good enough” story rather than a wholly accurate story. This allows one to create a course of action rather than obsess over the details and accuracy; (g) *enactment* – the idea that we act which informs learning, which informs further action. So, leaders act, which creates a social response, which constructs new reality that the leaders discover which informs more sensemaking and action (Nemiro et al., 2008; Smerek, 2009; Weick, 1995).

Leaders begin sensemaking in response to ambiguity and dissonance (Weick, 1995). Ambiguity is defined as uncertainty or having two or more interpretations (Merriam-Webster, 2018). Ambiguity can cause cognitive dissonance, which is a “lack of agreement...between the truth and what people want to believe” (Merriam-Webster, 2018). Ambiguity and dissonance are often precursors and results of sensemaking for leaders.

Ambiguity, dissonance, and resistance to change. Festinger (1957) found subjects in lab experiments avoided information that contradicted their mental models, or information that contradicted other information. The individuals in Festinger’s study experienced cognitive discomfort, or dissonance, which usually initiated avoidance strategies. The strategies resulted in complete rejection to simplistic or irrational interpretations of the incongruences.

Jermias (2001) conducted a laboratory study to examine why individuals resist change. When faced with a change that created cognitive dissonance, participants became insensitive to potential benefits of the change and rejected it. Jermias (2001) concluded that individuals can be overly-committed to a particular direction such that the cognitive dissonance created by discrepancies between reality and expectations cause immediate rejection.

Weick (1995) describes dissonance as *discrepancy* in the mind of the individuals that initiates sensemaking. Sensemaking attempts to relieve cognitive dissonance when a discrepancy has emerged due to an ambiguous situation. Individuals will often rely on their sense of identity to provide clarity and stability and reduce dissonance reduction, as in Weick’s (1995) fire disaster case study.

Pulos (2008) found professionals used dissonance reduction strategies during a professional paradigm change. The study found participants undertook explicit sensemaking in complexity as they grappled with dissonance between existing mental models and a new professional reality and struggled to adapt. Participants experienced a process of recreating their personal and professional identities to resolve dissonance long term.

Leadership and complexity. Dinh et al. (2014) rigorously reviewed 20-years' worth of publications in 10 top-tier academic journals. The researchers analyzed how often specific leadership theories appeared over time and integrated the similar theories into higher-level abstract categories. The top three emerging leadership theories in the literature include strategic leadership, team leadership, and, "contextual, complexity and systems leadership" (Dinh et al., 2014).

Dinh et al. (2014) explain that much of the literature continues to be focused on stable processes and structures, like personality and social networks, and less focused on dynamic processes, changing contexts, temporal changes within individuals and teams. Dinh et al.'s (2014) meta-analysis and recommendations for future research is a cornerstone of this grounded theory study. Although the meta-analysis focused on leadership theory, the conclusion holds relevance to the study. The authors recognize the inconsistent results related to each leadership theory.

Dinh et al. (2014) recommend conducting additional research to understand the intricate dynamics between the leader, complexity, and pace of change, focusing specifically on bidirectional responses between environment and leader. Dinh et al. (2014) also recommend studying real-world adherence to leadership frameworks and the

internal processes that help and hinder the leader. Both recommendations have relevance to the research questions and were integral to the collection and analysis of the data.

Carmeli et al. (2011) found trust to be an important moderator amongst CEO, top management teams, and quality of performance. The findings of a study by Huy et al. (2014) may also indicate trust is a mediating factor in leadership and performance. Subordinate perceptions of executive leadership practices correspond to their level of resistance to change (Huy et al., 2014).

A robust, well designed 3 year longitudinal case study involving a large IT company examined the perception of changes, as well as the perceptions of the leader, during the planned radical organizational change. Broad, purposive sampling occurred within the organization at all levels focused on diversity to reduce bias with snowball sampling thereafter.

The study found that change efforts often fell short during the implementation phase when lack of executive communication and follow-through caused negative perceptions and increased employee and middle management resistance to change. The finding may indicate the lack of trust mediates resistance to change, like trust mediating quality of decision-making in the Carmeli et al. (2011) study. Middle managers expressed a desire for support from executives and analyzed statements and actions to determine their motivations (Huy et al., 2014).

The study adds another dimension to the dynamic between leaders and subordinates revealing that not only are leaders' behaviors important to subordinates, but their motivations are of concern as well (Huy et al., 2014), which indirectly conveys a need for trust. The conclusions also imply the motivations and sensemaking of a leader is

important to the relationship they have with subordinates and how influential their sensegiving influence is within the organization.

Erwin's (2009) qualitative, action research case study found two major themes that support Schein's (2004) and Kotter's (1996) theories of change. First, key leaders involved in implementing change in a complex hospital environment did not have the desire and skill needed to be effective and leadership development helped to overcome this hurdle. Second, leaders did not understand the importance of financial outcomes and therefore did not take responsibility for the outcomes. Erwin (2009) found organizational change was only sustainable when leaders provided new cognitive structures for employees and individual behaviors changed. The findings hold critical information on how leaders influence followers' metacognition and schemas during sensegiving and the concept of leaders impacting outcomes by contextualizing meaning within the environment (Colbert et al., 2014; Erwin, 2009; Lord & Emrich, 2001; Narayana et al., 2011; Peterson et al., 2003).

Chapter Summary

It is clear executive leaders impact organizational performance through their sensemaking and sensegiving practices (Colbert et al., 2014; Lord & Emrich, 2001; Narayana et al., 2011; Peterson et al., 2003). However, several studies acknowledge direct correlations between executive leadership and organizational outcomes are challenging given many confounding factors related to environmental complexity (Brown & Eisenhardt, 1997; Colbert et al., 2014; Higgs & Rowland, 2010; Kaplan et al., 2012; Longenecker & Longenecker, 2014; Nadkarni & Chen, 2014; McClellan et al., 2010; Peterson et al., 2003).

In their meta-analysis looking at theoretical trends in contemporary literature, Dinh et al. (2014) conclude the literature places too much emphasis on leader-centric approaches that may overestimate the direct effect leaders have on the performance of their followers. The leader-centric research assumes a false sense of certainty regarding the reliability of direct leader-performance outcomes while under-addressing the dynamic between the leader and complex, ever-changing environments (Dinh et al., 2014).

The literature describes strategies for handling complexity and high-velocity change as it has grown in corporate and healthcare environments over the past 20 years (Carmeli et al., 2011; Collyer, 2017; Deschamps et al., 2016; Dinh et al., 2014; Erwin, 2009; Huy et al., 2014; Krichbaum et al., 2007; Nadkarni & Chen, 2014; Nadkarni & Herrmann, 2010; Porter-O'Grady & Malloch, 2015; Raaijmakers et al., 2015). However, Dinh et al. (2014) recommend additional research regarding how leaders are influenced by, and in turn influence, complex environments and followers within the organization.

Cognitive structures and processes have a strong influence on strategic choices and leadership practices, yet the unpredictability and uncertainty that characterize complex environments may create inconsistencies that impact an executive leader's effectiveness (Dinh et al., 2014). There is insufficient literature examining if and how healthcare executives adapt their sensemaking and associated sensegiving practices in response to growing complexity in the current healthcare environment. Therefore, the influence of complex, dynamic, and fast-paced environments on executive sensemaking and leadership practices calls for further research.

The qualitative inquiry consisted of a grounded theory study and sought to describe and explain how executives develop insight relative to leadership in a complex

environment. The study addressed gaps in literature and knowledge to provide information regarding the process executive leaders use and experience while they attempt to form an effective leadership practice in a complex environment. Finally, the study helps clarify differences between tangible environmental challenges and the internal challenges leaders face as they grapple with how to maximize their sensegiving influence.

Chapter 3: Research Design Methodology

Introduction

Complexity and the pace of change are growing for organizations (Porter-O'Grady & Malloch, 2015; Senge, 1990; Zimmerman et al., 2001). In health care, complexity has increased over the past two decades due to several shifts in regulations, markets, technology, and social variables (Burns, 2001; Maillet, Lamrche, & Lemire, 2015; Porter-O'Grady & Malloch, 2015). The changes are forcing executive leaders to adapt their approach to ensure organizations remain fiscally viable and continue fulfilling organizational missions (Erwin, 2009; HFMA, 2011; Maillet et al., 2015). The scenario makes executive leadership in health care a frequent topic in the literature as some organizations struggle to meet strategic goals as attempts to improve value only create more complexity undermining the efforts (Burns, 2001; Erwin, 2009; Maillet et al., 2015; Zimmerman et al., 2001).

Extensive research exists in the field of leadership theory, particularly around leadership outcomes (Dinh et al., 2014). The literature describes how leadership processes can impact the emergence of outcomes through leader-influenced structures and interactions with followers (Dinh et al., 2014). However, outcomes associated with specific leadership theories and practices are inconsistent (Dinh et al., 2014). Traditional leader-centric approaches often overestimate the direct effects of leadership on outcomes as they rely on data and past judgments to predict future results and do not fully consider environmental context (Dinh et al., 2014).

Research also examines executive leaders' internal cognitive structures and processes, and their impact on leadership behaviors and outcomes (Burns, 2001; Finkelstein & Hambrick, 1996; Huy, Corley, & Kraatz, 2014; Longenecker & Longenecker, 2014; Raaijmakers, Vermeulen, Meeus, & Zietsma, 2015; Senge, 1990). Yet, executive leaders exist within complex systems (Dinh et al., 2014; Porter-O'Grady & Malloch, 2015; Nadkarni & Chen, 2014). Executive leaders are affected by unpredictable environmental influences like events, politics, and interpersonal phenomenon, and leadership influences from other sources in an organization (Dinh et al., 2014; Porter-O'Grady & Malloch, 2015; Nadkarni & Chen, 2014). Understanding executive leaders' insight regarding the bidirectional influences between a complex environment and their attempts to maximize their influence may provide additional context around the use of leadership theory and practice standards in an ever-changing, complex real-world setting.

Research design. Qualitative research examines the "subjective meaning or the social production of issues, events, or practices" (Flick, 2014, p. 542). Therefore, qualitative research was appropriate for the study of an individual's internal experiences and processes, and subsequent actions (Creswell 2014; Flick; 2014). The research context was large urban healthcare systems since the environment is current and complex (Burns, 2001; Erwin, 2009; Porter-O'Grady & Malloch, 2015). Research participants consisted of executive due to the disproportionately high amount of influence the roles have in organizations (Dinh et al., 2014; Finkelstein & Hambrick, 1996). Criteria and controls were implemented to minimize variation and maximize validity (Flick, 2014) using the selection process of the study sites and participants, although some

modifications were made to the selection processes as this constructivist grounded theory study progressed.

Grounded theory. Although traditional leadership theories have shown applicability within certain contexts, they inconsistently or inadequately described the dynamic between environmental complexity and application of leadership practices (Dinh et al., 2014; Porter-O'Grady & Malloch, 2015). Given the lack of sufficient theories in the literature to explain the phenomenon of interest, the research used grounded theory methodology. The grounded theory approach uses inductive and deductive modes to identify emerging patterns in empirical data and generate a new explanatory theory of the phenomenon (Flick, 2014).

Grounded theory must include systematic data collection with concurrent analysis and be grounded in practical research, often in the field (Flick, 2014). An iterative approach to data analysis is used to identify patterns and themes, which are then abstracted into concepts (Brown & Eisenhardt, 1997). Concepts can guide additional data collection and are recursively analyzed to higher levels of abstraction until a cohesive theory emerges that explains the phenomenon (Brown & Eisenhardt, 1997; Flick, 2014).

The constructivist approach of grounded theory is a critical realist ontology and subjective epistemology (Charmaz, 2014; Levers, 2013), meaning one's reality is constructed and co-constructed by interacting with the world and others in it. Crotty (1998) describes the constructivist paradigm as meaning created out of the interaction between individual realities. Sensemaking and sensegiving theories also reside in the constructivist paradigm and constructivism aligns with the researcher's personal

disposition. Alignment between the grounded theory approach and the researcher's paradigmatic disposition lessens the risk of bias, limitations related to fit, and ultimately missed information or interpretation (Fernandez 2012; Walker & Myrick, 2006).

Constructivist grounded theory harmonizes with the phenomenon of interest and data collection needs by using researcher-developed interview protocols to study an experiential process of executive leaders. This experience includes environmental inputs, internal subjective processes, and external environmental impacts, specifically leadership that requires interaction between the environment, the leader, and people with other subjective realities. Together these elements co-construct reality, rather than reality being an objective construct with a single meaning.

Constructivist grounded theory also supports the method of data collection of interviews using researcher-developed protocols (Charmaz, 2014). Constructivist grounded theory also supports novice researchers who work in the field and may have completed a literature review. Purist grounded theory avoids a comprehensive literature review (Glaser and Strauss, 1967). However, in this constructivist study, a literature review provided context and sensitizing information on complexity science and cognitive science that informed the research questions and further involved the researcher in data generation.

In constructivist grounded theory, the data collection influences the researcher and the researcher influences the data collection, which recursively informs the emergence of concepts and the theory construction (Levers, 2013). Charmaz (2008) assumes: (a) Multiple realities exist that are constructed under subjective conditions, (b) the research process emerges through interactions, (c) the researcher and participants

have positionality that must be considered, (d) together, the data is co-constructed by the researcher and participants, rather than the researcher observing an object. The very study of complexity coincides with this view of contextual importance and thereby resides in the same paradigmatic arena.

Research Participants and Context

Participation in this constructivist grounded theory study required a focus on executive leaders, which was accomplished through purposive sampling. Purposive sampling selects participants based on substantive criteria that homogenizes the sample, increases validity, and best informs the research questions (Creswell, 2014; Flick, 2014).

Participants included typical executive leaders, considered tenured executives in complex healthcare systems. C-suite roles were initially considered for inclusion in the study including chief executive officer (CEO), chief operating officer (COO), chief financial officer (CFO), chief medical officer (CMO), chief nursing officer (CNO), chief quality officer (CQO), and chief information officer (CIO). Participation criteria in this study focused on currently employed executives with at least 2 years of experience, which allowed participants time to experience the phenomena of interest. The inclusion criteria for participant selection did not consider leaders' performance or evaluate the effectiveness of practice. The study sought to explain sensemaking and sensegiving as it exists for those experiencing it in complex health care, and how leaders attempt to maximize their influence according to their self-reported efficacy toward intended outcomes.

To address the element of complexity, initial participants were executives in major urban healthcare systems in Upstate New York. Initial participants had oversight

in systems with one or more hospitals licensed for 400-900 total acute-care beds and provide several major services, including but not limited to ambulatory, surgical, and emergency services. Finally, the leaders supported organizations that care for a mix of patient populations, defined by ethnic diversity, medical issues, and socioeconomic variables, and be subject to the Centers for Medicare and Medicaid Conditions for Participation (CMS, 2013). The executive leaders in this study came from five different organizations across Upstate New York.

Organizations fitting the criteria were experiencing a multitude of complex variables (Burns, 2001; Erwin, 2009; HFMA, 2011; Maillet et al., 2015). Complexity variables may include tightening regulations, increasing reimbursement requirements, mergers and acquisitions, revenue and resource challenges, new market transparency and exposures, evolving technology, and changing needs of patients and employees (Burns, 2001; Erwin, 2009; HFMA, 2011; Maillet et al., 2015). The research revealed these are not the only contributors to complexity, nor are acute health care organizations the only affected environments. Theoretical sampling evolved the criteria to include executives beyond the c-suite and beyond the acute setting. The broader selection criteria included c-suite, vice president, and administrator roles that deal with variables recognized in the field as contributors to complexity. This increased the scope to include complicated a long-term care system, which reported experiencing a similar phenomenon of complexity (Burns, 2001; Erwin, 2009; HFMA, 2011; Maillet et al., 2015).

Purposive sampling recruited a non-probabilistic sample of 17 participants. The primary goal for sample size was eight to 15 but the need for additional data expanded the sample to substantiate the emerging theory. Grounded theory research bases sample

sized on theoretical sampling and saturation, rather than a prescriptive number (Harris, 2015). Theoretical sampling is an iterative process that identifies concepts as patterns emerge from the data. The process informs further sampling and data collection, seeking a *saturation* point when no new concepts emerge (Harris, 2015). Riley (1996) points out most studies reach saturation between eight and 24 interviews, while Guest, Bunce, and Johnson (2006), suggests a sample of 12 participants is enough to reach the thematic saturation appropriate for a grounded theory study of a homogenous group. Thomson (2011) recommends planning for 30 interviews, yet also consider the research questions, population, the sensitivity of the phenomena, and the researcher's ability. Evans (2013) points out the danger of assigning a specific number of interviews that supposedly ensures credibility since the development of concepts and theoretical saturation should drive sampling and data collection.

Alemu et al. (2015) assert that constructivist grounded theory favors smaller samples with richer, more detailed interviews, like this grounded theory study. Specifically, "Constructivist Grounded Theory mythology's focus on identifying and developing concepts on the bases of a few, but intensive, data collection endeavors, rather than aiming at representation and generalization," (Alemu et al., 2015). The depth and intensity of the data collection allow the researcher the opportunity to co-construct emerging concepts with the participant and develop the emerging theory.

The study was rooted in already well-established theories allowing intense and rich interviews that applied a theoretical lens to practice. Complexity science was used to frame the context of current health care. Sensemaking and sensegiving theories framed the cognitive processes and leadership practices of executive leaders in complex health

care. In line with recommendations from Alemu et al. (2014) the constructivist approach, a broad and deep interview protocol, theoretical sampling, and member checking improved credibility and trustworthiness. Literature review, executive sentiment, and preliminary testing of the interview protocol supported the potential emergence of major themes enough for a developing substantive theory of sensemaking and sensegiving for the population in the current context. In the case of this study, subsequent chapters address limitations in saturation through identification and recommendations for future study.

Although purposive technique does not yield a sample that is representative of the population (Creswell, 2014; Hancock & Gilet, 2011), it would have been impractical to use a standard probability approach. Potential candidates were contacted using the professional and academic networks of the researcher. This type of sampling was helpful in quickly identifying potential participants and opening access through networking connections.

Targeted recruitment provided the greatest probability of finding committed participants given the nature of fast-paced executive roles, with only the highest priority information typically coming to conscious attention for these individuals (Carmeli, Tishler, & Edmondson, 2011). The researcher asked colleagues to assist in recruiting interested participants. The researcher provided contact information for colleagues to share with potential candidates with an invitation to contact the researcher if interested. The researcher also asked unaffiliated executive leaders, identified through and using an online professional networking website. Names, roles, and organizational information were available on this voluntary professional networking websites, although this method

was not fruitful in producing participants. A letter, acting as a guiding script (see Appendix A), was used for networking contacts and to contact potential participants directly using email, professional online networking websites, in person or via telephone.

Snowball technique asks participants to recommend additional participants that may fit the study criteria (Creswell, 2014; Handcock & Gilet, 2011). At the end of each interview, the researcher asked participants, if willing, to provide the invitation letter with contact information to any interested peers that met the study criteria. Although participants seemed engaged and willing to help, this method was also mostly unfruitful, probably due to the limited time of the executive leader and reserved follow up of the researcher via email.

Researcher's relationship to the participants. The researcher in this study was a registered professional nurse and has been a leader in a healthcare organization that fits the research context. The researcher should have knowledge of the study subjects and contexts to assist conversation and questioning, and relate ideas during analysis (Evans, 2013). Glaser and Strauss (1967) suggest suspending expertise and preconceived notions to encourage objectivity to the greatest extent possible. Executive leaders at the researcher's place of employment only participated at the end of the study to refine high-level and abstract concepts associated with the theoretical development. In addition to standard measures, discussions were general to avoid personal details and conflicts of interest, and to protect anonymity and confidentiality.

Protection of Human Subjects. Participants in the study were required to give informed consent. Interviews were conducted at mutually agreed upon neutral locations.

All recordings and transcriptions were secured in electronic format in two locations on the researcher's password protected computer, using encrypted, password protected files. Anonymity was ensured by removing all identifying information including names and detailed organization demographics. Digital audio recordings resided on a digital recorder kept under lock-and-key and the researcher's password-protected device/computer. A professional transcription service was used to transcribe the digital audio recordings. All documents and recordings were kept for the duration of the study and will be destroyed 5 years after its completion.

Participant numbers and gender-neutral pronouns were used in place of names and when referring to participants in this research report. Other identifying information were abstracted to obscurity. Organization and work setting details, professional affiliations, and discussion of awards and outcomes were removed or abstracted to obscurity. Any direct quotes have been selected carefully to preserve anonymity. The participants were made aware that this dissertation will be published, related articles may be published in scholarly journals, magazines, and web media, and findings may be presented at academic and professional forums, adhering to the privacy contract (see Appendix B).

Instruments Used in Data Collection

This constructivist grounded theory study explored, describes, and explains the phenomenon of interest (Creswell, 2014; Flick, 2014). For data collection, the researcher conducted semi-structured in-person interviews with designated participants. Interviews were approximately 60-minutes in length, depending on the participant's availability and how questions were asked and answered.

Qualitative interviews are performed when a researcher seeks to describe and “unfold the meaning” (p. 3) of the designated participant’s experiences, “articulate their reasons for action” or answer the question “how something is done” (Brinkman & Kvale, 2015, p. 127). The definition aligned with the purpose of the study to describe the process of leadership insight emergence. The semi-structured format consisted of open-ended questions and sub-questions (see Appendix C). The approach guides the interviewer yet preserves a conversational flow of information and insights (Brinkman & Kvale, 2015; Flick, 2014). The interviews did not always include every question in the interview protocol, while other spontaneous probing questions clarified ideas and concepts. As the study evolved, additional questions were added to the interview protocol to obtain additional information and saturate concepts and themes. Alemu et al., (2014) discuss how constructivist grounded theory encourages the free exchange of ideas between researcher and participants as they co-construct the data through interview and encourages a dynamic evolving format guided by the findings.

Grounded theory requires data collection with concurrent analysis (Flick, 2014). Preliminary analysis of initial interviews informed interviews with new participants. Follow-up telephone or in-person questions were asked as necessary to approach theoretical saturation when new data and insights cease (Flick, 2014). Finally, field notes were used to record the researcher’s thoughts, feelings, actions and observations regarding the research (Charmaz, 2014; Evans, 2013).

Procedures for Data Collection and Analysis

The constructivist grounded theory method is a nonlinear, iterative, and evolutionary process (Alemu, 2014) (See Appendix D). Constructivist grounded theory

allows for and begins with a review of the literature, which becomes part of the study data (Evans, 2013). Data collection can occur through field notes, interviews, documents, and observations (Alemu et al., 2014). Data analysis requires transcription of interviews to enable data analysis (Alemu et al., 2014). Analysis guides further sampling or data collection, which recursively informs the discovery and development of the patterns (Alemu et al., 2014; Charmaz, 2014; Engward, 2013; Harris, 2015; Flick, 2014). Use of memos and coding assists the analysis of transcribed interview data through identification of the patterns (Alemu et al., 2014; Flick, 2014). Constructivist grounded theory uses three types of coding: open, focused, and theoretical (Charmaz, 2008; Evans, 2013).

Memos. The process of theoretical sampling and concurrent data collection and analysis should be described in memos kept by the researcher (Charmaz, 2014; Glaser, 1978). In grounded theory research, the researcher should avoid a priori about findings and maintain as neutral as approach and view as possible (Engward, 2013). Memo keeping intends to map the process of analysis, make the researcher's thoughts and feelings transparent, develop ideas, and identify additional concepts or opportunities for further research (Charmaz, 2014; Glaser, 1978; Harris, 2015). The practice can improve the researcher's theoretical sensitivity, or their ability to discern variables and relationships in the data (Engward, 2013).

In this study, memos became central to data collection, analysis, and theory development. Memos were kept by the researcher after interviews, during data analysis, and while writing about findings and implications. The memos assisted in organizing concepts and making connections between findings and categories. Memos provided a

sacred ground for the researcher to avoid jumping to conclusions too quickly by describing emerging thoughts and concepts that were not grounded in the data and put them aside and out of mind. Some of these emerging thoughts and concepts were later compared to data and in some cases were used to develop and modify the interview protocol (see Appendices C, E, & F). This allowed the concepts to be tested and validated or rejected later by analyzing the participant's responses.

Coding. Charmaz (2014) describes coding as labeling segments of interview data with a short, precise name that conveys its meaning. Coding is a process of identifying and abstracting meaning from linguistic data. Coding can use in vivo codes or exact phrases used by the participants or assign new labels that convey more concise meanings or use a combination of both types (Alemu et al., 2014).

Open coding. Open coding is the initial stage of analyzing the raw data. The researcher focuses on the original question and searches for concepts by deconstructing the interview transcriptions (Alemu et al., 2014; Charmaz; 2014). The process of open coding looks for action words and gerund verbs. The researcher should only attempt to analyze limited sections of data and use memos to assist in concept abstraction. The researcher should move quickly through the data and remain open and moderate preconceived notions. Constant comparison between emerging concepts and responses refines meanings. This stage is open for as long as data is collected.

Over the course of five months, the data in some cases were open coded up to three times. This was due to the use of constant comparative method which developed the researcher's perspective and lens to view the data. New insights continued to emerge with each subsequent pass of open coding. The process was nonsequential, where open

coding took place again after focused and theoretical coding to provide perspective on the fit and meaning of the data and to assist in developing accurate themes.

Focused coding. The goal of focused coding is to use the most frequent and significant open codes to organize and synthesize the data into categories (Alemu et al., 2014; Charmaz; 2014). This stage looks for new and repeated themes and how they might relate to existing categories or form new ones. The process further abstracts concepts into a categorical hierarchy and identifies core categories that are constantly compared with the data, analyzed in memos, and becomes the foundation of theoretical coding.

Theoretical coding. Theoretical coding looks for patterns in the data that can be abstracted into higher-level concepts and categories, and then hypothesizes how they relate (Alemu et al., 2014; Charmaz; 2014). Major themes discussed by the study participants are represented by the core categories. During theoretical coding, the analysis moves from description and representation to conceptualization (Alemu et al., 2014). Memo writing allows further conceptualization of the interrelatedness of themes, how they work together, and relate to the participant and their context. During this phase, a theoretical framework is constructed from the data that signifies an answer to the original research question posed by the researcher.

The move from focused coding to theoretical coding was the most labor intensive in this study. Dimensions, properties, themes, and categories easily changed positional hierarchy depending on the context provided by a theoretical lens, research question, or priority level assigned by the researcher. This peculiar experience did not seem to

change the higher-level theory that emerged, which remained intact from an explanatory and process perspective, regardless of the hierarchy of lower-level categories and themes.

Credibility, Transferability, and Dependability

Alemu et al. (2014) and Bringer, Johnston, and Brackenridge (2006) recommend using computer-assisted qualitative data analysis software (CAQDAS) for organization and facilitation of coding, memo writing, and integration, to enhance credibility.

CAQDAS was utilized to assist with the analysis given the large amount of data. Using memos, the researcher recursively compared the emerging concepts and theory against the empirical data to improve credibility and validity (Alemu et al., 2014).

Member checking is a process of obtaining feedback from the participants during the interview, immediately after, or long after the initial interview to validate the emerging concepts and theory (Alemu et al., 2014). The process supports the constant comparative method and construction of the theory. In some cases, member checking was used to clarify or verify the meaning of findings and took place in person or over the telephone. An open rapport was developed with the participants to encourage honest feedback, and member checking remained conversational.

Grounded theory requires data collection with concurrent analysis (Flick, 2014). Preliminary analysis of initial interviews informed the need for member checking, which was conducted as necessary to verify accuracy and attempt to uncover new data as the theory approached saturation (Flick, 2014).

Chapter Summary

In 2018, a constructivist approach to grounded theory was utilized to answer the question: By what processes do leadership sensegiving insights emerge for executives of

large healthcare systems? The context was large urban healthcare systems providing a complex environment familiar to the researcher.

Following IRB approval, purposive sampling was used to identify initial participants. Leaders were contacted through the researcher's professional network and snowballing. Interviews were scheduled and conducted March through August using a researcher-developed evolving protocol guided by data collection and constant comparative method. The interviews were recorded using two electronic devices and transcribed by a professional transcription service. Written and audio recorded field notes were kept during this time to provide a rich description of the research context, and participant and researcher reactions.

Memos, coding, and analysis occurred at the beginning of data collection through August with the assistance of CAQDAS. Additional sampling and follow up interviews were conducted using a theoretical sampling technique that assisted the development of emerging concepts and the theory. Finally, June through August analysis of data occurred with a secondary comparison to the literature, and finalization of theory construct and conclusions.

Chapter 4: Results

The purpose of this study was to explain the cognitive processes that occur within executive leaders in health care as they make sense of complex circumstances and attempt to maximize their influence within the organization. Significant multivariable change, spawned by escalating employee, community, and patient needs, progress in technology, and health care reform, has challenged executives to maintain influence and solvency of their organizations. Semi-structured interviews were used to collect qualitative data that were analyzed using a constant comparative method. The emergent patterns encouraged additional theoretical sampling for further data collection. A focus group and elite interviews provided additional data for the emergent themes, categories, and theory.

Research Questions

This study sought to deepen the understanding of the executive leader's experience of making sense in complexity and attempts to influence others using language and action. The processes are nonlinear and recursive, with several inputs and outputs, and sub-processes. The well-established theories of sensemaking and sensegiving, and emotional intelligence were used as frameworks to understand the phenomenon in question. The context of contemporary health care was also a critical variable that provided a complex environment which challenges sensemaking and sensegiving.

Sensemaking is the theoretical process individuals use to interpret situations and events to understand and respond. Sensegiving is the activity of influencing someone else's sense of situations and events toward an intended understanding and behavior.

Four research questions were used to guide the inquiry:

1. What perceptions occur within executive leaders during sensemaking in a complex, real-world healthcare environment? (RQ1)
2. What cognitive processes occur within executive leaders during sensemaking in a complex, real-world healthcare environment? (RQ2)
3. What do executive leaders consider when attempting to maximize their sensegiving influences in complex circumstances? (RQ3)
4. How do executive leaders attempt to maximize their sensegiving influences in complex circumstances? (RQ4)

Answering the research questions. The research questions were used to create semi-structured interview protocols that guided the data collection. Data collection was broad and provided more data than is included in the findings. Findings in this qualitative grounded theory study are organized by themes and higher-level categories that emerged during data analysis. The emergent themes were later connected back to the research questions, which assisted in categorization and theory development.

To support findings, the participants' own words are included from the original interview and focus group transcripts. Participants are referred to by number (#) to protect anonymity and page numbers are included for reference. The analysis is supported and compared with existing literature in the body of the text where appropriate.

The framework should be considered a substantive, yet emerging theory due to limitations discussed in Chapter 5.

Data Analysis and Findings

Seventeen executive leaders of major metropolitan health care systems in Upstate New York participated in this study. Twelve executive leaders were interviewed including two chief nursing officers; two chief quality officers; one chief operating officer; a chief administrative officer; a chief medical officer; a vice president of support services; one chief experience officer; one chief executive officer; and two titles undisclosed to protect confidentiality. To homogenize the sample, all participants were executive leaders in large health care systems, which provided a sufficiently complex environment in which to study how leaders make sense and maximize influence in complexity.

Complexity in this study was characterized by multivariable rapid change and unpredictability that leads to the volatility of outcomes. The participants in this grounded theory study provided a rich and varied landscape of sensemaking and sensegiving in complexity. While major similarities existed with participants' perceptions of complexity, each executive had a unique lens due to differences in experiences, roles, and personal dispositions

Data from interviews were analyzed using constant comparative method. The ongoing process compares new and existing data to other findings in the study and the literature. Similarities and differences in the data expose patterns and explain processes associated with the phenomenon of interest (Strauss & Corbin, 1990). Patterns are abstracted or grouped into concepts, expressed as higher-level categories and lower-level

themes. Categories and themes are also compared against raw data to ensure the integrity of concepts is grounded in the data evidence.

Emerging themes and categories guided further data collection by revising the interview protocol and using a process of theoretical sampling. Theoretical sampling uses patterns in previous data to inform subsequent sampling and further data collection about the phenomenon (Charmaz, 2006). Ideally, theoretical sampling and data collection continue until concepts are fully saturated, and no new data or concepts emerge, and a core category can be identified (Charmaz, 2006).

A core category in a grounded theory study is the primary central theme that emerges from the data analysis (Corbin & Strauss, 2008). Although a core category is not always the result of a constructivist grounded theory (Charmaz, 2006), the research questions, interview protocol, and conceptual framework organized around a central idea. The core category in this inquiry, *maximizing influence*, emerged related to RQ3 and RQ4 and was informed by the executive leaders' perceptions (RQ1) and cognitive processes during sensemaking (RQ2).

Maximizing influence explains how these executive leaders attempt to maximize their sensegiving influence during short-term situational demands. A key category and an enabler of maximizing influence is called *sensesight*. Sensesight is a type of insight or intuition that emerges from recursive sensemaking about sensegiving grounded in emotional intelligence and strong mental models about the complex environment, people within it, and organization's mission and strategy.

To verify the emergence of maximizing influence and sensesight, additional sampling and data collection were employed toward the end of the study. A focus group

met consisting of five additional executives using an updated protocol (see Appendix E). The focus group included a chief operating officer, chief financial officer, chief information officer, and two other executives, titles undisclosed to ensure confidentiality. An intensive interview with a hospital operations administrator was also conducted to provide detail for maximizing influence. The additional data was compared to existing data to challenge and reinforce the core category. The data from the focus group and intensive interview strengthened the credibility and trustworthiness of the emerging theory by refining the accuracy of how the subordinate categories and themes are connected.

Grounded theory requires looking at the granular verbal data to begin identifying meaning to participant's words (Charmaz, 2008). Sometimes, snippets of an individual's language are extracted using their exact language, called *in vivo* coding. Conversely, sometimes the snippets are abstracted into a more concise word or phrase to improve clarity. Whenever possible, the data analysis in this study used the participant's actual words to convey meaning with commentary and analysis interwoven through the narrative. Longer quotes were favored over shorter statements to preserve situational context and leader's sensemaking and sensegiving processes.

Sensitizing concepts were used in the study design and analysis to frame the phenomenon of interest. Sensitizing concepts in a qualitative grounded theory study are ideas, concepts, or frameworks that guide the research, data analysis, and interpretation (Bowen, 2006; Charmaz, 2008). Sensitizing concepts in this grounded theory study include complexity science, as well as cognitive science including sensemaking and sensegiving (Weick, 1995), and emotional intelligence (Goleman, 1999; Mayer et al.,

2003). The concepts act as a theoretical foundation for the development of maximizing influence.

Maximizing Influence

The participants in this constructivist grounded theory study had several perceptions regarding the environment and their influence. The perceptions revealed information about the leaders' sensemaking and sensegiving processes. Perceptions are defined as a "quick, acute, and intuitive cognition," or "a mental image" (Merriam-Webster, 2018). The term *perception* was chosen by the researcher for RQ1 to allow a broad and flexible interpretation of participant responses that would not initially be limited by types or categories.

The core category, maximizing influence, begins with a rich and detailed description of executive leaders' experiences, perceptions, and cognitive processes while *making sense of complexity*. Participant sensemaking continues as they provide examples of their influence in the organization. Outcomes are explored through assessments and evaluations according to how closely outcomes aligned with the leader's explicit or implied intention, or if the leader believed they maximized their influence.

It is clear from participant reports as they *make sense of influence* that sensegiving in complex health care is multifactorial and mediated by more than just language. The executives consider, either consciously or sub-consciously, the foundation of their sensegiving influence. Maximizing influence includes precursors and practices that support effective sensegiving. Finally, the core category explains how leaders *build a foundation for intended influence* that allows for the emergence of a newly identified phenomenon, called sensesight, which is a major enabler of maximizing influence in

complexity. The process of sensesight emergence is outlined through detailed examples of participants' sensemaking about sensegiving. Maximizing influence and its categorical building blocks: Making sense of complexity, making sense of influence, building a foundation for intended influence, and sensesight, are outlined in Table 4.1 with associated themes, dimensions, and properties.

Category 1: Making Sense of Complexity

Making sense of complexity consists of the themes *multiple, simultaneous or high-frequency heat experiences, experiencing complexity* and *sensemaking in complexity*. The themes are elaborated through descriptions of contributors and responses to complexity. The properties and dimensions include variables external and internal to the organization, with effects external and internal to the executive leader, the organization, and colleagues. The making sense of complexity category explains what impressions leaders have of the environment and how the impressions came to be.

A main contributor to the complexity experienced by participants in this study was rapid and profound change. One executive said, "Health care is a very complex field, especially right now, and probably never more so than the current environment, and it's just getting more complex" (#9, p. 1). Another explained it like this, "I've been in health care since 1979. I've seen more change...in the last 3 years...than I saw that entire time [since 1979]. There are so many forces out there pushing and pulling at things. It's very complex" (#8, p. 1).

Table 4.1
Maximizing Influence

Category	Themes	Dimensions and Properties
Making sense of complexity	Multiple, simultaneous or high-frequency heat experiences	Contributors: Global and situational demands Complexity at the frontline
	Sensemaking in complexity	Dissonance and ambiguity Resistance to change Cognitive processes and perceptions
Making sense of influence	Enacting roles and practices	Seeker Planner/Provider Driver/Navigator Facilitator/Enabler Judge/Protector Marketer/Damage Controller
	Assessing and evaluating outcomes	Intended/Unintended Mediators Shadow Influence
Building a foundation for intended influence	Developing wisdom and competence	Self-reflection and improvement Competence and Mental Models Routine Practices Cascade of Compromise Strategizing & tools Emotional Intelligence
	Developing trust	Emotional intelligence Transparency and vulnerability Competence and Credibility Culture and Relationships
Sensesight	Sensemaking about sensegiving	“I need to do something different” Cues and Navigation Responding swiftly and thoughtfully Enacting role(s) and in what measure Mediating complexity Probability of Maximizing Influence

A 16-year veteran health care worker, now an executive, said, “What I've seen in the last 5 or 6 years, it was different than the first 10 years or so. It's been very rapid in terms of change . . . [it's] very complex now, a lot of concern, ambiguity and stress. Definitely a much more complex process and system than it ever has been” (#10, p. 1).

Another participant used their attempt to explain financial, regulatory, and design requirements for building a new hospital to executive bankers as an example. “These are men who run billion-dollar corporations and other complex businesses, but had a hard time comprehending as we tried to explain. Some of these people shook their heads and said, ‘How come you [healthcare] guys make it so complex?’” (#4, p. 2). The complexity of health care was hard to grasp even by executives in other fields considered to be complex, indicating a perception that health care is experiencing a higher amount of complexity than other fields. One leader explained, “[E]very day is different, and every day is changing. Just when you think you've got an understanding of a rule or regulation, it seems to change. It doesn't always change 100%, maybe it's just a little bit, but you never know what you're going to walk into” (#2, p. 1).

All participants described the transition from volume to value-based reimbursement as a core issue contributing to the complexity. The global paradigm shift has augmented the complexity in the already complicated health care field. The major perception of complexity is that it is characterized by multiple, simultaneous or high-frequency heat experiences. The theme illustrates a mix of major changes and situational demands that contribute to the complexity experienced by leaders as they attempt to

make sense of things. When asked to describe a recent complex situation, one CEO began, “Every. Really. Honestly, it is a very complex business.” (#7, p. 2).

Multiple, simultaneous or high-frequency heat experiences. All participants were asked to identify and discuss a complex situation they had experienced recently to understand contributors to the complexity. Many leaders spoke in generalities about the complexity they experienced. One started, “pretty much every day there's complex situations” (#1, p. 2). Most were able to provide a single example, but often provided multiple or alternated between generalities and specifics. In abstract, most executive leaders referred to multiple, simultaneous or high-frequency heat experiences, which became a theme and describes the nature of complexity experienced by participants.

Participants mentioned many contributors to complexity including rapid change and capacity for change, people and process problems, as well as technology, finance, politics, culture, patient acuity, and competition, with the regulatory pressures associated with the value paradigm underpinning most sentiments. Evidence of the participants’ cognitive processes, sensemaking, and perceptions were woven through their descriptions of complexity.

One participant described the current volume-based model as “a disaster,” with “backward” care delivery, based on caring for a high volume of acute patients rather than supporting the value of keeping people well. “We are very, very good at taking care of very, very sick people . . . but we’re backwards because we don’t try to keep your body healthy” (#5 p. 2). This participant’s concern resided around trying to dismantle the current system while attempting to rebuild a new system built around value:

What do you do in the middle? [Revenue] is still coming from volume and how do you make a transition for an organization, particularly in our [New York] state...most [organizations] run with small margins, so how do you do value?

We're living on volume. There's no real plan. (#5, p. 2)

Another struggle with value regulations is that they not only require certain outcomes, but some also require certain clinical practices. One leader commented:

When the government tries to legislate medicine, not outcomes, it just messes things up. I'm fine with the government saying, "We expect you to produce certain outcomes," but when they start telling you how that has to be done, it doesn't work and I think that's been shown again and again. (#5, p.3)

One executive discussed the challenges of holding clinicians accountable to the regulations, particularly in ambulatory care areas that have previously enjoyed practice freedoms and loose regulations, as opposed to the tighter regulations typical in acute hospital care:

There is a real disconnect right now between the pressures put on...hospitals versus . . . providers in a practice. [Practices] historically have had very little risk or issues [with reimbursement]. Now . . . there will be risk at the provider level for outcomes. One of my biggest challenges . . . is . . . how to create partnerships with physicians that helps them understand the pressures and the metrics and the outcomes that we're held to (#6, p. 2-3).

The changes create a confounding cultural factor as increasing regulations shifts autonomy away from physicians. One participant said:

Physicians, I think, quite frankly, have it worse...back in the day, physicians were the boss, captain of the ship. Today, they are no longer captain of the ship. They have to follow rules like us. Half those rules don't make any sense. They're under siege from insurance companies and EHRs and trying to remember change[s] in policies. . . . We have a policy on every single damn thing there is . . . I think the physicians struggle far more with this than we [administration and nursing] have (#4 p. 11).

Another participant said, “nowadays, residents and interns have a lot less autonomy [so] they never learn to make decisions,” which can lead to “knee-jerk reactions” that could harm the patient (# 5, p. 4-5).

Patient satisfaction and clinical outcomes were a major concern, with one participant commenting, “We're getting paid for outcomes and peoples' perceptions and experiences of their care...[but] your experience of care as a patient is only as good as the person standing in front of you” (#7, p.1). Their statement alludes to concerns about clinician competence and sensitivity. Another pointed out the challenges with the new regulatory accountabilities for physicians regarding the patient's experience:

Getting physicians to understand that patient satisfaction is important. Not that they don't want patients to be satisfied, but frequently, when we're talking about you need to take the time, you need to sit down, you need to listen to what the patient and the family have to say. These type of things, in a very busy environment . . . doesn't always match up with what their daily work is like (#6, p. 3).

The misaligned expectations and daily workflow are ripe with dissonance. Leaders explained that dissonance between the expected changes and the daily experience of patient care often resulted in “resistance to change” (#10, p. 3) and “dissent” (#15, p. 7).

Multiple, simultaneous or high-frequency heat experiences was described in detail by this executive:

We're going through three different things right now. One is function integration. The other one is facilities rationalization where we want to make sure we have the right amount of space in our facilities. The third is the change in our [operational] structure.

We just hired a new president . . . he's joining us in two weeks. We've restructured nursing. We've restructured the physician groups and so on and so forth. They're all happening at the same time. They also all are happening right as we were in the middle of budget season, ending one fiscal year starting another. (#10, p. 5)

The amount and resistance to change were joined by concerns over the speed of change:

It's evolving, but it's evolving slowly . . . trying to determine that timing is a really, really tricky maneuver. If you move too quickly . . . you will end up significantly hurting yourself even though it's the right thing to do. (#6, p. 3)

Complexity for executives in health care manifests through multiple, simultaneous or high-frequency heat experiences. The heat experiences started sensemaking processes for leaders as they attempted to understand and refine their perceptions of the environment. Next, sensemaking in complexity is explored as participants contemplated deeply to extract meaning from the current health care environment.

Sensemaking in complexity. Multiple, simultaneous or high-frequency heat experiences create explicit sensemaking opportunities for leaders. The opportunities were most often reported as experiences of personal and organizational dissonance, ambiguity, and resistance. The sensemaking in complexity theme includes the cognitive processes the leaders used in response to these experiences, and perceptions and conclusions about complexity arising from their sensemaking.

Ultimately, sensemaking in complexity describes how leaders perceive the environment, what they see as important, and their concerns. One leader summarized the experiences of many participants while discussing change management challenges associated with the shift toward value:

[The organization] has been working in different pockets . . . [and] that's caused a lot of concern and chaos, because people are not necessarily in agreement. . . . They don't necessarily want to change or see a reason to change. [It] is causing a lot of friction, a lot of confusion and concern and . . . ambiguity in terms of future state because we're changing . . . relationships and expectations. (#10, p. 2)

The participant describes work in silos and disagreement among groups and individuals. By using the words chaos, concern, confusion, friction, and ambiguity, they describe perceived ambiguity and dissonance. The leader is identifying cognitive and emotional states which signals elements of sensemaking and emotional intelligence as they perceive and interpret the emotions.

Dissonance was a common experience for the leader as they attempted to lead through the change. Another leader expressed concerns and confusion over not having the answers by summarizing, "People are looking for something different and I don't

know what the answer is, I don't think there is any answer right now" (#8, p. 5). Then they connect their ambiguity to complexity challenges, explaining, "It goes back to the chaos that's in health care and it's not easy. Not that it was ever easy, but it was more predictable" (#8, p. 5).

Leaders perceive complexity as unpredictable and it causes ambiguity and dissonance. This leader mentions the challenge of finding solutions by saying, "people are looking for something different," followed by an admission of not knowing the answer, an indicator of vulnerability. This leader perceives that individuals in the organization are looking to them for direction, yet the leader indicates ambiguity and confusion about the environment and potential solutions.

Another executive leader discussed a situation where a significant negative outcome had started an explicit sensemaking process:

There was like three things that I was working so hard to try to analyze and then double check and validate which happened to get us to this place. What systems failed or conversation or outcome measure or what was happening and then are you reading the situation truly right. (#12, p. 4)

The participant's anxiety is palpable, using words like "working so hard," and questioning if they had an accurate perception of the situation. Self-reflection and information seeking were common processes for sensemaking in complexity. In their attempts to sensemake, leaders reported seeking less ambiguous information by "using data to help make decisions" (#13, p. 2). This leader went on to discuss asking questions and sensemaking with a peer:

It was asking more questions to make sense or just kind of being able to talk about the situation and then either ask more questions, but think more about it or validate that your assessment is good . . . but nobody that will beat you up about all the things that must have failed or all the things that you mismanaged to get to a place where all of a sudden [the situation] had to become about a person . . . if that makes sense. (#12, p. 5)

This leader validated their assessment of the situation with a peer, who did not question or judge their actions, but helped them arrive at a new perception that the situation was due to an individual, rather than a “system” that failed.

Leaders were also concerned for middle managers and the multiple competing priorities they experience:

I worry about our nursing leaders . . . it’s always been a difficult spot...you’re between the patients, your staff and then [senior leadership] saying, ‘You spent too much money on staffing this month, you’re way above budget, your quality is down, what are we going to do about it?’ It’s very difficult to be a nurse manager right now. (#8 p.5)

Frontline staff, such as doctors and nurses, were also a concern as they deal with systemic complexity:

I am concerned about the complexity at front lines. I think all of us in this business had a real awakening when we went to EMR [electronic medical records]. We did a big bang. We lost physicians, we lost a lot of physicians just because they were changing . . . practice so significantly . . . That was a significant level of complexity. I think that was reeling in so many ways . . .

really the tipping point for a lot of people because what I see now happening particularly in as we move further into [the value model and regulations]. It's this fatigue of having to check the box, check the warning, the hard stops which we were very cautious of how many hard stops we put into the system. (#3, p. 7-8)

This participant describes “a real awakening” and uses the word “reeling” to describe the organization’s response to a “big bang” implementation of an electronic health record [EHR], meaning turning all areas of the health system on at once. The executive explains how some clinicians responded by leaving the organization and describes the new “fatigue” associated with keeping up regulated care. They describe being “very careful” with implementing “hard stops” that interrupt clinical workflows to warn clinicians about certain risks.

Electronic health records were a commonly perceived as a contributor to complexity as another executive described the impact on the frontline and coordination of care:

The biggest concern is consistency in care . . . That we keep the patient focused first. It is very, very easy . . . in a lot different electronic records for the documentation to become siloed, nurses do their documentation, physicians do their documentation, everybody's in front of a computer and people don't talk to each other.

That's a huge detriment to electronic records. There are a thousand benefits, but ensuring . . . you still have the expectation and have built the processes in a way that postures a team approach to care . . . If you go back 15, 20 years, we had paper records . . . go back to my notes from the day before and I

would read all the nurse's notes in between and it told a story. We've lost the ability to tell a story in the electronic record now. Without that story, you lose some of the subtle issues around care. You have to do everything you can to foster the environment of collaboration, communication between all the caregivers, and that's tough. (#6, p. 6)

Aside from the documentation requirements, this executive's sensemaking leads them to the cultural impact EHRs have on the frontline and new challenges fostering collaboration and teamwork. The leader describes it as "tough," indicating ambiguity around the problem. The leader points out problems with team sensemaking regarding patient care and sights the EHR as a barrier.

Another leader elaborated on people and culture being major contributors to complexity and resistance to change:

I think every problem is a people problem at its core . . . the availability of talent, managerial bench strength, [and] the 80/20 rule. You cannot go back to the same 20% of your workforce to solve every problem because there are just too many problems to solve. (#7, p. 3)

When asked if it was a problem with employee engagement, the participant responded,

I don't really think it's that people aren't engaged, I think that it's a real culture shift to help people understand that the way they've been doing things for 5 years, 10 years, 20 years, is not going to work in the current environment. (#7, p. 3)

This executive looks to the workforce to assist in problem solving, yet only perceives 20 percent of the staff as talented problem solvers. Lack of talent and competitive recruitment were pointed out by several participants as additional complexity factors.

Resistance to change was a popular dimension of *Sensemaking in Complexity* as leaders realize, “the way they’ve been doing things [in the past] . . . is not going to work in the [future].” Although this is clear in the minds of the leaders, the leaders need “to help people understand.” But a confounding challenge was explained by another executive:

How do you influence people, even if it's only in the context of being an employee, to begin to espouse to the values of the organization if they've never held those values previously? (#17, p. 4)

And another commented:

I think that people . . . have lost their sense of the art of what they do to practice medicine. It's become rote in some ways through the electronic devices. Maybe this is a generational perspective. I see the students that coming now and they're younger than my own kids. It's all they take it for granted this is the space that they live in and it's all—It seems, and I wonder, in their training and in their growth and development as practitioners where that art piece of it is coming into. I really feel like it shifted.

It's that bad I suppose in some regard but in other ways that's where we're going as a society with technology and advancements. Underneath all of that is a patient, who has a need. Who is in pain or comes in trauma or is having a baby or something where we're really first there to serve. I really believe that. (#3, p. 8)

These leaders point out challenges with dissonance between employee and organizational values. They mention generational and sociocultural changes increase the dissonance. However, through their sentiments, they seem firmly grounded in the organization's values, as they identify the dissonance through perceptions of contrast. These leaders

focus on social justice mental models that assist them in sensemaking and act as a guide for their leadership.

Participants often abstracted and simplified the environment by categorizing characteristics and contributors of complexity. This participant summarized the major elements of complexity in health care into five categories:

I think it's the perfect storm. First . . . we have aging population that's adding a lot of pressure to our healthcare environment. I don't know if we are ready for that completely or not. Secondly, the challenges with the political environment, whether it's right or wrong. The Democrats and Republicans have a different version of how health care should be handled, and that's causing pressure within health care.

Currently, the financial challenges that we're facing as reimbursement and everything else is getting tighter and insurance organizations . . . are adding financial pressures to all of our organizations. Four . . . the move to try to stay ahead. Whether it's public health, whether it's supply chain changes, whether it's changing needs of our patients. Just trying to stay ahead is causing a lot of stress and concern.

Lastly, I believe it's just the complexity of health care itself. We have within health care just like probably other organizations, other industries, the challenges with recruitment, with retention, pay issues. Complexities in terms of how we deliver health care to match what's happening with internet . . . and how we can stay ahead. All those are adding on. It's probably four, five different

things that are all happening at the same time in my point of view that's adding a lot of complexity and concern and anxiety and confusion. (#10, p. 1)

Sensemaking in complexity confirms executives of major metropolitan health care systems in Upstate New York have experienced complexity. Executives used metacognitive skills to discuss the way they thought about multiple, simultaneous or high-frequency heat experiences. The situational demands caused explicit sensemaking in complexity stemming from, and resulting in, personal and organizational dissonance and ambiguity. Their perception of complexity is that it is chaotic, unpredictable, and that it poses significant challenges for the leader as they sensemake and problem solve. Contributors to complexity include issues with people, culture, communication, technology, clinical problems and more.

Category 1: Making sense of complexity, refines leader mental models and assists the leader to understand the context for their roles and practices. Complex situations demand responses as executives attempt to influence people toward intended outcomes. The next category, making sense of influence, dives deeper into executive sensemaking and introduces sensegiving roles and practices.

Category 2: Making Sense of Influence

Executive leaders in this qualitative study continued sensemaking about how they influence others in their respective organizations. Sensegiving is a way leaders use language and actions to share their sense of the environment, and what is important and expected. Through sensegiving, the leader attempts to create shared mental models that to influence others' perceptions and resulting behaviors toward a leader-intended outcome.

While making sense of influence, leaders asked questions like, “How do we influence this culture here?” (#2, p. 5). Culture was continually reported as a contributor to complexity and challenger to the leader’s intentions, described in these comments about strategy and influence:

Because culture eats strategy, I’m not going to spin my wheels and waste my time. I’m just trying to influence it. If I have to influence one person at a time to try to create a ripple effect to move this culture, that’s what I’m going to do. (#2, p. 6)

The leader goes on to say:

As far as strategy goes and putting something on paper, everybody wants one but it’s just going to fail. I’m really afraid to put something on paper with strategy because right now, our culture is just going to gobble it up. I’m really just focusing on what small influences we can have in the departments I oversee. (#2, p. 7).

Cultural challenges left this leader with the perception that a strategic plan would be ineffective. Instead, the leader focused on addressing the cultural challenges, “one person at a time,” if necessary.

Leaders discussed learning from past mistakes and dealing with the stigma of mistakes in a culture of longevity and its potential effect on intended influence:

I screwed up a lot and I learned a lot in my previous organization. I was able to take those learnings and apply them here to be more effective in my role. One of the challenges . . . is that we have such longevity here that people go from one position to another and they grow . . . and] mature within the organization in

various roles . . . it's harder to let go of the, "You screwed up in the past." (#17, p. 6)

The ways leaders make sense of influence in complexity informed how they *enact roles and practices*. This leader's explicit, ongoing sensemaking about influence appeared mid-sentence during interview: "I think in my role that's what I'm-- I think that's the pivot I need to make and coach people more than tell them how I think something should be done" (#9, p. 5). Others had clear mental models, saying, "Part of my role, and I think all of our roles as leaders, is to help people to understand and prioritize differently" (#17, p. 3) and another stated, "The role of the executive is to inspire, engage, and enable" (#12, p. 5).

Enacting roles and practices. The enacting roles and practices theme emerged as executive leaders explained how they handled influencing in complexity. First, the roles are expressed as archetypes and explained in abstract. The participants' own words are used to demonstrate how the roles and practices are enacted. Practices represent properties of the thematic roles and dimensionalize the leader's behaviors. Participants often reported playing many roles simultaneously and, in some cases, demonstrate overlap as they explained their complicated jobs.

Seeker. The seeker was the first theme in the enacting roles and practices category to emerge as it was apparent executives were asking questions. The seeker archetype is characterized by seeking information about problems and situations through observation, research, and asking questions. The leader information assists in sensemaking, both about the complexity of the context and how to influence:

One of the things that I try to do, I wish I could do more . . . just show up on a unit scrubs, and asked to spend some time with one of our bedside RNs. . . . But when she said now, "What did you want to get out of these hours? She's trying to like- And I said, "I want to see what works for you as the bed side RN. I want to see what doesn't. Where are the wasted steps? Where are there things you wish you had?" because it really helps me while I'm looking at resources . . . [it's] very helpful to me, to see the real stuff as opposed to you just sitting in front of me as a director and saying, "I need six more nurses. 10 more automated blood pressure machines, four more monitors." Very different when I see a staff nurse using that equipment. That helps to ground my decision making oftentimes, and also provide real examples to my non-clinical non-nursing colleagues when I can actually describe something I've seen very helpful (#1, p. 4).

This leader used the seeker role to see "the real stuff," that provides context of the day-to-day work at the frontline staff. The executive also used this as a sensemaking and sensegiving opportunity by talking to frontline staff. By being an active seeker and explaining why they were there, the leader communicated with the staff, valuing their feedback and giving a sense of what the leader feels is important.

Another leader discussed seeking additional information during patient grievances, explaining they, "either talk to the individual that's complaining . . . to really try to figure out. . . . Are we missing something that maybe went under the radar, or I go back to my team and say, "Alright, tell me everything you've done, tell me everything that's going on with this" (#2, p. 3).

Almost all leaders mentioned talking with their direct reports and frontline staff. In particular, the practice of *rounding* is common, or informal walkthroughs of work areas to check-in:

I round on my team a lot to see what they have going on. To see if there's anything that I can help them with. Then I try to just look at what meetings do I have on my calendar? How do I have to prepare for those meetings? Then from there, I try to just plug in what it is that I can work on and influence (#2, p. 3).

Another leader described the temptation to focus on tasks, but centers around the importance of rounding:

So as a leader, you need to be out. You can't just live in your office. I'll be honest, it's easy to do because there's a ton of stuff that you've got to get done. You need to make that conscious effort to get out, get to your direct reports, talk to them in their office. Go see their staff, go to their staff meetings, be out and about on the floors just walk around the other people. Communicate, talk to the doctors, go to the physician lounge. These type of things. It's amazing what you can hear that you won't hear otherwise (#6, p. 9).

This leader also explained the importance of seeking information outside of the organization from a governmental regulatory standpoint:

You do a lot of conversations with other places [organizations] and you do all you can to make sure that you've got your finger on the pulse of what the government's doing both locally within the state and nationally (#6, p. 4).

The seeker role supports the cognitive process and leadership practice of seeking information that informs sensemaking and perceptions about complexity and situational

demands. The seeker role is foundational to the planner/provider role that determines how to plot a path and allocate resources toward intended outcomes.

Planner/provider. The planner/provider role includes ways the leader strategizes and plans, as one leader states, “Sometimes it takes willingness to recognize that even though you want to do A, you need to do B and C first before you can come back and do A” (#6, p. 7). The planner/provider role also makes decisions about resource allocation:

Everybody gets blood drawn in the hospital, not everybody's getting blood sugars, not everybody. You know what, I'm going to spend money - right now I'm going to justify the lab labeling. I'm either going to hold off on more glucometers, or I'm going to say I do see some worth of that, but I think we could cut it in half, or you put more in one unit like an adult medicine unit. Where you're probably going to have 60% of people could be diabetic versus pediatrics. Out of those 72 pediatric beds, I wouldn't need a glucometer every other bed . . . if you can get the right resources then we should be able to deliver the right care. One sentence, I feel like my job is to get that bedside or in the resources they need in people and in staff. (#1, p. 3).

Assigning ownership, metrics and timelines are also part of this archetype. Executives said they needed, “metrics to track . . . if we are trending in the right direction or is there still some opportunity . . . and using data to help make decisions about how to better formulate the work of the group” (#13, p. 2).

Another leader uses the seeker role to understand how to provide resources to the frontline:

Are there some potential IT things that we can do with you in your office that would be helpful? Are there things that we can do within our IT system or within our processes that will help you be successful and help us be more successful? (#6, p. 4).

The planner/provider role includes ways the executive leader synthesizes and mediates the change and complexity of the environment and characterized by “thoughtfulness” (#1, p. 3; #3, p. 10).

That thoughtful piece that when you do make that decision that you really feel like you’ve considered all the factors and you haven’t left any out. And that’s hard because you know how many factors especially at this level- So you’re not just managing the piece ICU. That you have all the units. So how do you really use your thoughts here? You’re getting every single factor for all the units that this jobs encompasses. . . . How do you distribute the resources? You not always give them to the person who speaks the loudest. (#1, p. 2)

This leader talks about “using thoughts” to ensure they have a complete picture of the needs. Part of providing is balancing the whole and making sure resources are allocated where they are needed.

Driver/navigator. The driver/navigator role is characterized by the leader driving towards goals and outcomes, while being cognizant and navigating of multiple, complex variables. The driver/navigator role must also consider people, culture and politics if they wish to successfully navigate sensitive issues. Part of this archetype is “reacting swiftly” (#3, p. 1) to situational demands. Executives said, “People who can navigate

complex organizations effectively in order to achieve their influence are the successful leaders” (#17, p. 5).

One leader made the following statement regarding a recent performance evaluation by his peers and direct reports:

Overwhelmingly, the most of them said that I'm viewed as a change agent for this organization. I don't know if that was my intent because I came at a time where the organization was starting to change . . . I somehow got portrayed as the person that's driving this change which is the other way around. I'm reacting to the organization's need for change. (#10, p. 6)

However, this leader was an acting change agent, regardless of the origin of the purpose for change. This executive was clearly placed in the driver/navigator role as they made sense that a change was needed and proceeded with practices to drive the change.

Facilitator/enabler. The facilitator/enabler role is comprised of activities that facilitate discussions and team approach to sensemaking and problem solving. One leader said, “That’s honestly one of the big things I do, I do a lot of facilitating: sitting in on meetings, listening to people, talking to physicians, talking to nurses. One of the biggest portions of my job is to facilitate groups, appreciating that within the middle is the patient” (#5, p. 9). Another commented about their role, “It's facilitating a discussion so that everybody's heard and ensuring at the end of each discussion or meeting that everybody is in agreement of what was discussed and what the plan is” (#6, p. 7).

When in the facilitator/enabler role, the leader enables others to move forward through barrier removal and coaching. “Where historically I may have jumped to providing the answer, providing the solution, I think to be a more effective leader now we

can maybe point out things that we're seeing but maybe ask more questions and allow staff to come up with the answers” (#13, p. 3).

Judge/protector. The judge/protector archetype is characterized by the leader’s judgement of outcomes, holding self and others accountable, and creating a fair culture and environment. In discussing what is important in leadership, this leader said, “I really think it’s just. It’s thoughtful and fair and just. You try to adjust culture, and make a just culture,” and later remarking about cultivating a just culture, “I think you have to make it easy for people to do the right thing” (#1, p. 10).

The judge/protector is used sometimes in conjunction with the planner/provider role, for instance, this executive questioned about capital and human resources, “How do you distribute them according to equity? How do you distribute them justly?” (#1, p. 1).

The judge/protector archetype also embodies the ideals of leader as a buffer for complexity as they judge what could be harmful and protect their subordinates. This leader explains this aspect of the role as needing to, “minimize the effect of change as much as possible. Knock the band-aid off right away, or not make too many drastic changes in their workday, in their expectations. Sort of ease into [change] so they don't get that shock treatment.” (#10, p. 4). Another commented, “I think we really have to pay a close attention to the stress levels and things that people are taking on and what they're able to do or not do” (#13, p. 8).

This executive needed to make a judgment about the competence of a direct report. The executive was working on an issue with the individual “for many, many months” regarding a critical outcome measure not meeting target:

[I had] lots of meaningful conversation around the issues and the barriers associated with [the issue]. In one of those discussion it was clear that there wasn't going to be an ability . . . to change to meet the expectations . . . [or] to move forward without a person who had the skills. The outcome was . . . that particular leader's role had to change, and it had to change very, very quickly. He was dismissed from that particular role and moved into a different role and then subsequently had to move out of the organization.” (#12, p. 2)

The executive went on to explain, “I was emotionally drained . . . when it becomes about people then it becomes incredibly—at least for me—pretty scary. Scared to ruin or redirect somebody's life, but that's part of what we have to do” (#12, p. 4).

Marketer/damage controller. The marketer/damage controller role is about communication and is most related to typical definitions of sensegiving. While in this role, the leader assumes the “burden of proof” as they attempt to “sell the why” (#10, p. 1). Finally, when the leader or peers influence the organization as not they do not intend, the marketer/damage controller will mitigate fallout, risks, and misunderstandings, usually through additional sensegiving communication.

Most leaders said, “First and foremost, you have to be a good communicator” (#6, p. 4). Leaders often discussed the role of marketer in terms of making a case for change: People are not going to change unless they see a reason for it. Just because you want them to change, they're not going to do that. Part of what I'm looking to do is make the value proposition known and try to sell that so it's become more of a marketing skill right now. (#10, p. 2)

The leader continues using the same example but explains reciprocal role of damage controller. Although the executive's intention was to act as effective marketer and protector, the efforts had unintended consequences:

If I look at colleague engagement as an example of where the intent was for us to integrate and to show that we are one organization and one system and get some synergies . . . for us to get better, improve our quality and to care for our patients and colleagues in an appropriate way and the byproduct of that could be financial savings. [But], I might have portrayed that we're doing this to save money and cut costs. That's where I think I had to do some damage control and share that was not the intent. I think sometimes there are unintended consequences of . . . the method. (#10, p. 4)

To consolidate and synthesize the organization's responses to the complex environment, the executive reports distortions in the perceptions of people in the organization. The intent was to pull complexity away from the frontline, yet the result was an unintended misinterpretation of cutting costs when "it all gets lumped together." The leader had to continue sensegiving to clarify the main intent of the interventions, which was to improve quality and care.

Assessing and evaluating outcomes. Part of leader sensemaking about their influence includes *assessing and evaluating outcomes* of their practice and the organization's performance. Outcomes are dimensionalized in the analysis by judgments of intended outcomes, unintended outcomes, maximizing influence, and shadow influence. The outcomes reported by executives were not mutually exclusive, often presenting with simultaneity (intended and unintended), overlap (i.e. intended and

maximized), or loose couplings in the form of vague binary continuums (i.e. intended/unintended outcomes; maximizing influence/shadow influence).

Intended outcomes. Executive leaders in this study were asked how they know they are influencing the organization as they intend. Leaders said, “From a numerical, from dashboards and performance for quality, we have targets, so we'll know if we're effective on some of the performance metrics that we were given to reach. I hear feedback from my boss” (#9, p. 7).

Other leaders discussed 360 performance evaluations, while others mentioned growing assignments. “I've gotten new areas to cover I think that that's a sign that I've been able to have some influence, because as my role is changing I think that's a sign” (#3, p. 10).

Some executives mentioned evaluating more subtle signs of influence:

I start to look to see if I can influence agendas, could be the board. I have a board committee that I support, I'm trying to influence the organization through that board committee for quality. Over time, that agenda and the dynamic of that meeting will change, but I'm trying to influence the organization by multifold performance, the quality, the governance piece, and influence and strengthen the board quality committee. (#9, p. 7)

One leader explained their personal measure of intended outcomes by saying, “you have to have a plan for how you hope to influence and I define success as that plan being realized (#17, p. 4-5)

Leaders developed routine practices that allow them to increase the probability of having intended outcomes:

if I had to pinpoint what were the two or three things, the first is the ability to build effective relationships at all levels. Understanding who your stakeholders are, who you need to have at your table in order to have the greatest sphere of influence, and working hard to develop those relationships is probably the single most important thing we can do, anyone can do, any leader can do, any accomplished organization, in order to be successful. (#17, p. 6)

This leader discussed engaging people during meetings by having rich introductions that allowed them to connect:

They're not engaged, so the first thing I try to do is to try to engage them right away . . . It's amazing how interested people are in hearing about these people around the room, whether they've known each other or thought that they've known each other for the last 20 years or whether they're fresh new faces at the table. That's the kind of thing that I try to do because I realized years ago that this is BS. We're sitting here around a table and we're not going to be nearly as effective as we could be unless we know something about each other, unless we feel invested or feel a sense of responsibility towards each other. (#16, p. 6)

This leader discussed a strategy with a director to assess and address staff to change the culture. The leader's sensegiving is also apparent here:

I said, "Have we ever done an assessment? Have we ever actually looked at the 140 employees that we have in the emergency department and behind closed doors with complete confidentiality, ranked them as an A, a B, or a C?" They looked at me like, "What?"

[I asked] . . . who's engaged? And who's clinically competent? And who's this? and who's that? In order for us to respond appropriately, we actually need to know. Do we all think that [so-and-so] is a B? If we're all on the same page that [so-and-so] is a B, then we're all going to respond the same way to [so-and-so], because we have the same action plan for our Bs. I think there's probably some discrepancy where they think that they're on the same page, but some of them think somebody is an A, and some of the think that same person is a C and they don't realize that.

It's a Studer Model. How do we pay attention to retain, coach, and develop the As? How do we take the Bs that we can rise up to As? We need to rise them up to As. How can we take the Cs that we think we can rise up to Bs and bring them up to a B, and use the word laggards, but the C minuses and manage them out? That's the Studer principle of the high, middle, low? It's the same thing. That's some of the work that we're doing in the emergency department right now is figuring out how do we do that because they've never done it. It's interesting. (#17, p. 9)

Unintended outcomes. Unintended influence typically resulted from confounding factors related to complexity and self-reported inadequacies. This leader describes how unions, a complexity contributor, affect her freedom of practice and produces unintended outcomes:

I have to be very careful and cautious with what I say because people could go to the union and then you've got to go to – it's just, that's something we don't even talk about but unions add a whole another level of complexity to everything. I

probably do influence people. Not as I would intend only because I can't be as honest as I ought to be with them. (#2, p. 7)

Multiple, simultaneous or high-frequency heat experiences can also result in unintended outcomes as this leader points out attempts to synthesize complexity by integrating changes for frontline staff led to unintended perceptions that all changes were related to financial savings: “The intent is to minimize the different changes and do them differently or at multiple times, but the consequence sometimes could be that people view it as one big thing to save money” (#10, p. 4).

This leader explains how mistakes can follow a leader, saying, “The things that you messed up and you learned from, it's not only hard for you, the leader, to get over those, it's also harder for the organization to forget” (#17, p. 6).

This participant described a mix of outcomes and feelings associated with a difficult decision that had intended influence on the organization, but unintended influence on an individual:

People's lives don't completely hinge on one decision that I had to make at one point. I literally got so drained . . . because it came from a person which was incredibly—I can start crying just thinking about it. Because when it comes out it gets really difficult but, in the end . . . we made a good decision and they blossomed outside of the particular situation but that was really, really difficult. (#12, p. 5)

The overlap and ambiguity of outcomes was typical of the scenarios the participants provided. Executive leaders in health care also discussed their attempts to maximize their influence in complexity and situational demands.

Shadow influence. For some executives, a toxic environment laden with distrust and blame can push them into another extreme of influence, called shadow influence.

Some leaders described contrived actions to force influence:

What looks to be very social 3 years ago was very much strategic. Then just keeping up with them socially and professionally and just working those relationships . . . Others think it's just of the goodness of my heart. It's not at all. It's absolutely a long-term period of manipulation . . . [but] the neatest part is that then those contrived relationships become genuine relationships over time, which is a nice side effect. It's worked out well for her. It's worked out well for me. It's worked out well for the [organization]. (#16, p. 1)

This leader uses the words “manipulation” and “contrived” to describe their practice.

The leader has abstracted the emotion out of the practice, or at least the description of the practice. Shadow influence rarely showed up as a static binary, as this leader described the contrived relationships “become genuine” over time. The leader also points out the benefits to all involved, signaling a continuum of practice, self-reflection, and interpretation. Shadow influence usually showed up in toxic environments. This leader went on to provide more detail about the context of their influence:

I always invite others to the table if or when I know I need to convince or persuade anyone of anything . . . it serves two purposes: 1) it allows the impression that this is a conversation in which other points of view are welcomed while not emphasizing I have a real target of focusing my energy on one person in particular; and 2) it holds that person accountable for what they've heard and how they've responded, because there's a witness.

[In one example], it all came back when this person tried to blame me and my division for causing a bottle-neck in an otherwise smooth process . . . but not only had I witnesses in the room, I followed up our meeting with a point by point recount of what we discussed and how we came up with our solution. He tried to accuse me, essentially, of something I was able to contest with evidence right away and as a result I ended up getting my way and he ended up looking like a jerk.

The executive followed up with regrets about the state of the organization and the effect it has had on their practice:

It's honestly a little disappointing to know that ultimately, my approach which has evolved over years in dealing with my colleagues, indicates I act from a place of distrust. It serves me well and is usually well-enough disguised as long as I don't have to defend myself, my words or actions later like in this case . . . but it saddens me that this is the reality . . . the climate is so dysfunctional, no one trusts anyone.

Leaders assessed and evaluated outcomes of their practices. These observations were conscious and subconscious, and evidenced by leaders' expressed articulation of judgement or the sentiment they used. Assessing and evaluating outcomes provides a valuation in terms of intended and unintended outcomes and provides ongoing closure to the sense executives are making about their influence. Outcomes were taken in context and seemed to be mediated by complexity contributors, particularly regarding Maximizing influence and shadow influence. Regardless of leaders' approaches, all seemed to struggle with efficacy, saying "Right now, we're in this very scattered

approach to everything. A lot of really small-scale tests and none of which are really resulting in the "aha" moments that, "This is the way to do it" (#17, p. 1). This left leaders with additional ambiguity and wondering about how to improve their influence outcomes.

Category 3: Building a Foundation for Intended Influence

Leaders not only identified their roles and practices but discussed ways they enhance their leadership acumen. A main tenet of maximizing influence was *building a foundation for intended influence*. Building a foundation included deeper levels of cognition, and metacognition, and was sometimes a conscious or subconscious. Building a foundation for intended influence explains how leaders use self-reflection and assessing and evaluating outcomes to improve their practice. Actively building a foundation for intended influence seemed to mediate the leaders' ability to navigate complex situations and ultimately improve the probability of maximizing their influence toward intended outcomes.

Developing wisdom and competence. Leaders reported strategies that enhanced their practices. They described a process of seeking information to develop "deep wisdom and insight" (#12, p. 4), about themselves, the external environment, and the organization, its culture, and its people. *Developing wisdom and competence* is a way leaders improve and refine their mental modes and reportedly increased the chances of Maximizing Influence over time and during situational demands. It is characterized by the seeker and judge roles, and by disciplined routine practices and self-reflection. Some leaders said, "I don't know that I've ever really thought about what's made me successful"

(#17, p. 6), indicating that these processes are to sometimes subconscious, yet can be discussed when the leader enters a state of self-reflective sensemaking.

Leaders often discussed practices that supported consistent outcomes, which became a part of their routine:

In the multidisciplinary groups that I'm involved in, we always begin the meeting with a brief. In the meeting with a debrief and part of that debrief is, "Here are the action items that I understand we're moving forward on and here are the timelines for those, and here's who's responsible. Is that correct? Are we all in agreement or did I miss something?" We make sure that everybody's in agreement moving forward. Sounds simple, but it's amazing how many times in a meeting it's not done. (#6, p. 7)

Other leaders took a more general approach, using guiding principles such as, "Presence, availability, and willingness to listen but also willingness to challenge physicians regarding our practice" (#6, p. 5). This leader reflected on humility and drive toward perfection explaining how, "not taking yourself too seriously or feeling you're the end-all be-all because when you get to have a lot of empowerment or control you start isolate yourself and feel like you've got to do everything well, it's really not the case" (#12, p. 5).

Another leader describes something similar by imparting wisdom about just-in-time knowledge seeking that helps them "stay ahead" and lead from the edge of the change, without feeling like they need to be an expert always:

[You work] hard to know or at least, speak like you know, whatever it is you have a sphere of influence around . I certainly don't know everything there is to know about value-based purchasing, or the inpatient prospective payments system, or

even quality. One of the things that allow me to be successful over the last 3.5 years, is that I knew enough to speak to what it is I needed to speak to and have some amount of authority based on that knowledge. (#17, p. 6)

He illustrates the concept with a story about a music teacher friend who had gotten a challenging new job:

He thought about what was he going to do in order to be successful in that role. How was he going to be a successful music teacher, having never picked up a tuba and played with any proficiency? His philosophy was, he doesn't have to be an expert, he just has to be one day better than everybody else. I've told people that story and they're like, "What you're saying is you're just one day better at this quality stuff than everybody else?" If you can know just a little bit more to be able to help guide the conversation, or to teach and influence, then I think you can be successful. (#17, p. 6)

This executive describes openness, transparency and vulnerability:

Obviously, I influence the organization, but I'm far from perfect. I can convince people to do things, and then I'm not always right. You have to be willing to say I wasn't right and take the blame the same way that you want to take the credit when things go well . . . and the best thing to do is to give the credit to the people who are working for you (#5, p. 10)

The comments also display the leader's self-reflection, which became a strong property of the developing wisdom and competence theme. Many also said, "I've had situations where I really need a particular outcome, either behavior or a level of production . . . I use emotional intelligence" (#16, p. 1). Leaders also reflected on past experiences and

outcomes to inform their future practice. Being “thoughtful” also comes up again in this leader’s statement:

Effective leaders are extraordinarily introspective and they think on a daily basis, “What did I do well or what didn't I do well? What can we do differently? How do I approach that differently?” You can see certain leaders, who you would say good leader versus middle-of-the-road leader. The thing that may distinguish them . . . is that a good leader probably has a little bit more introspection. Not that they're self-deprecating but they want to be more thoughtful and they think about how does my action today influence or impact things, and how can I do that differently tomorrow. (#17, p. 6)

Another leader explained, “I think as far as my ability to influence that my outside experiences and my personal growth helped make my influence that much more productive and stronger in the organization, if that makes sense” (#3, p. 10).

This leader makes a comment about her parents, connecting her current practice to early experiences. They describe self-regulation during situations to be comfortable with silence, lest they not allow others to:

One of the things I definitely see is to be comfortable with silence. My mother never was comfortable with silence, so it's one of those things you probably get from your parents. You may be having to formulate a thought before you say something, whereas your peer next to you just blurts out what's on their mind. The person who's blurting stuff out may not give the other the opportunity to talk. (#1 p. 7)

Challenging individuals as a means of influence was also common, as was experimentation and evaluating outcomes:

When I said, 'we have to do some things differently,' it was another experiment that I was trying within my own leadership style. I think I would consider myself in this space, in the senior or executive leadership space to be a novice still. I've given myself permission to experiment. That conversation with [a physician group] was an experiment, if I throw down the gauntlet in this way, or if I challenge a fellow leader in this way . . . what is their response (#17, p. 11)

One leader commented on the driver role, saying, "Maybe it has something to do with the degree and the effort with which to provide that influence" (#17, p. 5), that affects outcome. After a discussion about the importance of supporting and developing people, another leader mentioned the energy required for such practices: "I think that the hard part, maybe the exhausting or emotionally draining side of it is if you try to always be about people, as well as the outcomes" (#12, p. 5).

This leader discussed self-reflection and information seeking to constantly improve:

I'm constantly evolving, so I think about that process that, whatever you call that, revelation or epiphany, and really the way I approach that is through, number one, a significant amount of self-reflection like, "What do I need to do differently? How do I need to approach this differently?" A fair amount of research, how are other people who are doing this differently doing it well, and then some observation, "How do the people that I interact with or the systems or processes

that I interact with have to work and flow differently tomorrow than they did yesterday." (#17, p. 9)

And other leaders spoke about improving skills:

I felt the need to in staying current and staying relevant that gaining new skills, more ability to be thoughtful and to process the information, pushing my own comfort zone, pushing those boundaries through the school. (#3, p. 10)

One executive described a *cascade of compromise*, allowing the leader to go through a tiered assessment and reaction to compromise during situational demands”

There's this cascading thing that I didn't realize this until I was listening to the conversation here but . . . I start to do the trade-off where you say, "This is about trading off the *how* [*emphasis added*] we are doing this, this is about trading off the *when* we're going to get to this, or is this about trading off the *where* [*emphasis added*] we are going." In that order because that's the last thing you want to trade-off. That's the direction you're supposed to be going in. (#14, p. 12)

This leader alludes to refining mental models to “process the information,” and also mentions the word “thoughtful,” which many other leaders also used to describe practice that yields intended outcomes or maximizes influence.

Leaders also commented on the alignment of personal and organizational values as a measure of influence and success:

Personal values are . . . cemented, formed earlier in life by your experiences:

Things that were formative as you develop professionally or as you develop as a child. We use our values to influence how we lead . . . if you don't have a strong

set of values or if your values don't align with maybe the values of the organization, that perhaps you won't be successful. (#17, p. 4)

Most profound were comments about a strong grounding and competence about foundational elements. This leader says:

“I'll be bold to say part of being a senior leader or an administrative leader we have to have the greatest content expertise, has to be the organization strategy. Strategic plan, the outcomes. . . . We have to have this deep understanding of the organization's mission, vision, values and strategic plan. Everything we do has to come back to that. I think there's this on-going deep reflection that we have to have of the organizational culture and dynamics going on to constantly weigh how feasible is that strategy, outcomes and where are the people. . . . If we don't have the deep knowledge and belief . . . then it's very difficult to keep the organization on track in a moment and in a longer period of time. The aha moment for me almost daily . . . I try to spend so much time now in the belief behind is this the right strategy? (#12, p. 9)

Deep contemplation and ongoing sensemaking were common as leaders evaluate the foundations that drive their practices. Another foundation that executives brought up was the quality of relationships and how to develop trust. One leader summarized saying about the foundation, “Being knowledgeable, being introspective, and developing relationships, are the three most important things you can do in leadership” (#17, p. 7).

Developing trust. Executives built upon the sentiments about people and culture to discuss *developing trust*. Trust was related to emotional intelligence and characterized by listening, understanding, and responding to others. One participant said:

I know all the doctors and having relationships with the providers is extremely important . . . because you have to be able to talk to the docs about what they're experiencing [when] they feel they can't provide good patient care . . . [or] when they are not being smart, responsible and compassionate and caring, you have to be able to talk to them about why . . . I have relationships with tons of doctors. I can say I talk to them . . . frequently. The problems are seldom just the physicians, the problem is usually that the physician is frustrated from something. The system is not helping him, he perceives it isn't helping him and that's very important (#5, p. 8-9).

One executive mentioned relationship building with physicians, stating, "I've spent the last year building a positive relationship with [a physician group], really understanding their operations and what makes them tick and how that works" (#17, p. 10). Another executive similarly described trust in terms of engagement and its reciprocal effect on influence, stating, "You're not going to be successful as an organization if physician leadership is not at the table and engaged" (#6, p. 5).

This leader describes routine practices that build trust by recognizing and respecting individuals:

I make sure to always do some basic things that you hear in more traditional leadership training which is praise in public, criticize in private, but always admit when you don't know something or admit when you're wrong about something. I'm very much a believer in that. The other piece is attributing the success to the person really responsible for it . . . personally and publicly, because it just does that much more to bolster their self-confidence. (#16, p. 2)

The leader says, “I’m very much a believer in that,” indicating how practices are often connected to mental models that develop over time through experiences.

Another leader discusses a vision of developing trust in a culture and employing a process:

In a perfect world, I would want . . . A culture where if someone has a question or they see something that doesn't make a lot of sense or they don't understand, that they're comfortable bringing it forward and asking, and the person that they're asking the question to is open to receiving that question and have their discussions on it, that the person asking can understand why. . . .

We have rolled out just culture in the last year. We actually have a four hour course that we teach that was actually originally designed by Duke called Safe Choices that we are getting physicians involved in as well. It is a course that we are requiring all employees to attend by the end of this year which spends time talking about just that. What is just culture, care accountability, what are the expectations, how do you move closer to being that high reliable organization?

(#6, p. 6)

The quality of the foundation that leaders cultivate affects their self-reported ability to influence toward an intended outcome. Developing a foundation increases the probability of intended outcomes through contemplation of practices and effects. The category allows leaders to refine and strengthen the accuracy of their mental models, which informs routine practices. Leaders also reported situational demands that required unique insight into how to sensegive and maximize influence.

Category 4: Sensesight

Executives in this study reported many ways they attempt to maximize influence. Many have built a foundation for intended influence that by developing wisdom and competence that support routine practices and developing trust that provides strength and understanding in relationships and motivates and secures bidirectional openness to sensegiving. Wisdom and competence and trust yield high-frequency desirable outcomes according to leaders. However, executives reported complexity as a major challenge to their leadership efficacy.

Situational demands often need the leader to “do something different” or uniquely approach circumstances. During sensegiving, leaders used cues from others to gauge how effectively they are communicating, engaging, and influencing. Together, the complexity of heat experiences and cues from the receiver of sensegiving, pushed the leader into a process of explicit sensemaking about sensegiving.

Sensemaking about sensegiving. During complex situational demands, leaders usually began sensegiving and quickly looked for individual or group cues and responses. This process often pushed leaders into an explicit state of sensemaking about sensegiving as the leader attempted to make sense of the people’s reactions and gauge their responses. One leader discussed it during the focus group by saying, “There's no more time in health care right now, so to have 16 directors around the table spending six hours together and walk away the same way they entered the room, I was thinking in that moment...I probably allowed the dialogue to go on for too long, but I didn't know what to do.” (#12, p. 10). This executive points out what many of their peers mentioned, that they understood what was happening, but did not know how to proceed with sensegiving.

Also, during the focus group, another leader talked about looking for verbal and nonverbal cues, and then sensemaking about how to reengage through sensegiving:

I watch to see how engaged or for me or even quite frankly distress. Distress is a good sign sometimes because we're in communication. People are saying what they're concerned about but not responding either verbally or non-verbally because even the non-verbals speak volumes. I only watch for that. I think it'll be challenging for us to figure out . . . How we then reengage people. (#11, p. 7)

Conversation in the focus group continued around thoughts about silence while sensegiving:

I find these days here silence is the loudest cue . . . When I'm either in a meeting or working on something, if there is complete silence, it either means that there is a total lack of knowledge and it's been talked about . . . which is rare because we're really great people. [Sometimes] there's silence because there's such overload [that] people are paralyzed, which is a fairly new dynamic for people . . . Usually, people were silent because they're so angry. They don't trust you. It's not a trust thing, maybe it's kind of is, but it's more there's like this paralysis or disengagement or just can't connect with the dots. It's a new cue I'm watching for right now . . . because we haven't struggled with silence because we've had healthy cultures. (#12, p. 6)

This leader responded about silence and possibly anger existing during sensegiving saying they “flush out the dissent”:

If you're working in a group dynamic trying to get to an end state, anger is one thing. They're considerably exhausting, draining, but you'll try to give them or

get the group to a particular spot that they need to be in, but the silence you got to bring out the anger, you've got bring out the dissent. You got to flush that out so that you can actually address it . . . Once the dissent is on the table . . . It's either an individual's perspective . . . the group perspective, or it could even be your perspective as new information . . . that's now being introduced so then . . . how you reframe now that position to get to the desired outcome, given the new perspectives that are being introduced. (#15, p. 11)

This leader also mentions the bidirectional flow of sensemaking and sensegiving, as the leader attempts to understand the silence or anger and is presented with new information that informs their sensemaking and helps them reframe before reattempting sensegiving.

During the focus group this leader responded about sensegiving going beyond reframing and “selling.” The participant mentioned tools, like metrics, measures, agendas, and the strategic plan, that can be used as leverage to help others make sense:

It's very interesting now that it's not necessarily how to sell. Although then, to [flush out] the dissent or [use] some sort of thought-provoking, tools, statements something. This is why tools . . . have a way of normalizing the discussion so that people-- you can draw people out. Making it, not emotional, about a process, about a thought process. A new way of being can help draw out a different type of feedbacks that we can keep moving forward because without it we'll be paralyzed.

(#12, p. 7)

Other leaders in the focus group discussed the cascade of sensegiving influence through the levels of the organization:

We've been talking about cascading and strategic priorities because . . . for it to be successful, you can no longer just say we have a . . . campaign and [this is] your role. . . . How do I begin to think about/contextualize the strategic priorities for me, and how do I communicate those in a way that are meaningful to those that to report me or even those that I estimate direct influence over which I think many of us have. A friend of mine used to call it influence authority. You don't have any formal authority but you have influence authority over somebody.

How do you use that influence authority to get people to understand that vision which you're using or for that's a sensegiving so that they can begin to make sense and then use that same model to then sensegive to those below them. (#17, p. 14)

Separately, this leader described barriers to the sensegiving process of communicating a vision:

They either just don't see my vision—which is sometimes the problem—is my ability to communicate that vision which is something that I need to work on. Sometimes I'll just say that. Sometimes I'll back up and try to re-explain both where I'm coming from and my vision, and see if I can get them to understand it in a sense where they can repeat it back to me in their own words so I have a better understanding of where they're at and how they're perceiving me. (#16, p. 5)

This example shows the bidirectional nature of the sensemaking and sensegiving dynamic. The leader verified the subordinate's understanding by asking them to repeat back in their own words. The leader was sensitive to and seeks to understand the subordinate's perceptions. Vulnerability and self-reflection were also key in this example

evidenced by the leader's identification and transparency about communicating vision as an opportunity for improvement.

Similar processes during sensegiving were echoed in the conversation about the cascade of compromise:

The other thing, they're more negotiable and so my mind going through that saying, "Okay, this person wanted to do it slightly differently, is that okay? Do we still get to the same destination?" Working my way so that I cascade the trade-offs to, say, "What does it take to get all people on board," because ultimately you want to get to the same destination. Values and everything are obviously the last thing you trade off and you don't really go there, but having a cascade of what you work your way through with levels of trade-offs. (#14, p. 12)

This leader's discussion about a cascade of trade-offs demonstrates how sensegiving is often a two-way dialogue as individuals exchange information, compromise, and socially construct a new reality.

One participant discussed how they confirm group sensemaking by summarizing and asking "is that correct? Are we all in agreement or did I miss something?" (#6, p. 7). The participant went on to explain how the simple practice can ensure people walk away with the intended understanding. Verifying was reportedly an important aspect to sensegiving, while vulnerability reinforced a sense of trust.

This leader discusses their strategy for sensegiving in the Marketer/Damage Controller role:

I basically had to go around and share with people the advantages of making this change and integrating our systems and things like that. Some of it is financial,

some of it is regulatory, some of it is just less work for them. There are different strategies in terms of what will resonate to people, and part of step one is to understand what people would appreciate. Step two is working towards selling it to them. (#10, p. 2)

The leader's sensemaking about sensegiving revealed a strategy as they attempted to maximize their influence. They identified "what people would appreciate" about the change, synthesized complexity and shared the benefits, while simultaneously selling the change through sensegiving. The leader further explained how they gauge the outcome of sensegiving and some of the challenges:

I just try to read between the subtle hints that people are dropping. Some people are—I have probably a dozen different key stakeholders . . . There are a few that buy-in right away and are supportive and stand right next to me and share that message. There are others that are very resistant based on the questions they ask, based on what I hear from what they're sharing with their teams, based on the resistance I get in terms of accepting it. (#10, p. 2)

Each stakeholder was different, even though the leader's approach was probably similar. The leader brought up resistance, echoing the same challenges that all other leaders brought up. However, some leaders brought up a phenomenon, called sensesight. Sensesight was reported as ideas, insight, or intuition that emerged from Sensemaking about sensegiving and maximized influence during complex situational demands.

Sensesight emergence. This leader's experience with sensesight happened when they realized they were not leveraging the size of a newly merged health system:

As we've acquired more organizations in the last 7 years, they've all been allowed to work independently on their own just as usual in the past. That was something that was a big issue for me. We need to change that because what's the point of merging if we don't get value—and we leverage our strength and our size. That was something that prompted me to say, "We're not doing that," and the outcomes are not where they need to be.

This leader identified an issue and the need for change. They went on to describe the way they gauged their sensegiving:

I just try to read between the subtle hints that people are dropping. Some people are—I have probably a dozen different key stakeholders . . . There are a few that buying right away and are supportive and stand right next to me and share that message. There are others that are very resistant based on the questions they ask, based on what I hear from what they're sharing with their teams, based on the resistance I get in terms of accepting it.

That's my way of telling you whether someone's on board or not . . . I have a spectrum of how people are buying into this and I'm not surprised . . . I see more leaning towards resistance and less towards acceptance at this point at least. Yes, we are a large organization, but our patients and colleagues don't feel that because they still feel they're working for the small company that they used to work for in the past. We're not getting the right outcomes either. Those are a few things that I took away and I said, "We have to change that because we need to get the right outcomes by leveraging our size" (#10, p. 6)

This leader said the outcomes continue to vary, but his continuous sensegiving has begun to turn the organization in the “right direction,” with some even calling the leader a “change agent.” Although it would be hard to label this as an intended outcome, the leader’s influence is maximized given the readiness of the organization.

Another leader described a moment during a meeting where sensemaking about sensegiving revealed a physician did not understand the need to change and the emergence of sensesight:

. . . that for me was incredibly draining in the moment because I value the physician deeply and had heard a lot of the different dynamics that were going on but knowing that the ask was, ‘you actually have to be different or it’s going to be back to this other situation. You actually have to be different than you are right now.’ (#12, p. 9)

The leader went on describing additional sensesight and discussed illustrating and translating the strategic plan and organizational values for the group to redirect the conversation:

I think it’s in that moment how do you hear and value and listen to where everybody’s at. Minimally by the close of that meeting the aha moment was to me how can I take this conversation—the details and paralytic points, and, if there’s silence—either draw out [illustrate] and normalize [translate practically] the strategic plan to provoke some additional discussion, and bring the conversation back to a place where this is the strategic plan, this is our values, this is how we have to go forward based on what everybody has talked about.

Another leader explained their experience of sensesight during a situational demand involving an attempt to influence a contracted service. First, the leader explained, “I said, ‘we have to do things differently’ . . . and I thought about how do we do things differently, and changing my approach was one of them” (#17, p. 10). The executive, making sense of influence, said, “I had this mini-revelation, they are contracted service and I own that contract. Therefore, I have the ability to influence, in a different way than I had before, the way that they approach the problem” (#17, p. 10).

Their self-reflection and evaluation of outcomes revealed a need to “do things differently,” leading to deeper contemplation about the nature of their influence. The “mini-revelation” in this case is insight about the foundation of their influence, partially in the form of a contract tool, but more as a need to change their approach. The leader describes the way insight emerging from sensemaking about sensegiving informed their practice, acting as judge, facilitator, and marketer:

We previously had these shared measures where our success was their success.

[Now] saying, ‘that's not going to work in the new world,’ and really beginning to think about and get them to understand, that accountability measures are meant to be accountability measures, and if we have an overall global measure for them, then they're always going to deflect the responsibility off. But [explaining to them], the reason we can't do that anymore. (#17, p. 10-11)

Now, acting as driver, they engaged the stakeholders, set expectations and socially constructed the new reality:

[I said], ‘I want you to come to the table with one of the four or five measures that you're going to say we're comfortable being held accountable to these.’ Then

reinserting those measures into the contract to get them then beginning to roll in that direction.

The leader made further comments about the importance of, “how we're communicating the burning platform. How we're communicating the need for change.” The leader used language to communicate the reason for change, the urgency associated with the provider group assuming accountability, and the reinforcement of contractual consequences. They did this through engaging the physician in the decision-making process for choosing accountability metrics. The leader then comments on the result aligning to their intended outcome:

I could see the change the following week, where she internalized what I had said and what we were talking about. Understood the why and began to lead differently than she had potentially before, or at least interact differently than she had before. A positive change from that coaching.

The leader was successful at sensegiving. Finally, making sense of their influence using reflection, retrospect, self-awareness to abstract and generalize as learning:

I went through this mini-revelation. How I was doing things as a leader X number of months ago, versus how I need to do things as a leader moving forward has to change for us to get to where we need to get to. I'll call it a reset . . . we have to do things different and we have to work different. (#17, p. 9-10)

The leader attempts to be aware of all variables contributing to the complexity of the situation, while simultaneously evaluating their internal cognitive and emotional responses, and the response of the physician to their sensegiving. This contextualized

smaller decisions about how to adapt and proceed and they successfully maximized influence.

Another example of sensesight comes from a different executive that was attempting to get a director group to narrow the number of strategic goals:

An ultimate aha moment was at one of the director meetings. [Another executive] and I were trying to help the group get to a place where we were going to do our goals differently for fiscal year 2019, knowing how much work we all are doing, we have to do it better. That was the aha moment when . . . after a whole great session of learning different tools [to limit the number of priorities], everybody drifted back to having 25 goals . . .

When I was hearing all this dialogue, I was getting overwhelmed. Then I said, “If I were to say, 95% of the success of FY19's budget is on [this one metric], does that change this conversation?” And what did the group do? They asked, “Then why are we talking about anything else?” (#12, p. 10)

This leader became overwhelmed by the conversation as the directors began to drift toward an unrealistic number of goals. The leader had an “aha moment,” that provided insight on what to say at that moment to center the group around the priorities and the directive. The leader’s bold and sobering sensegiving statement about the budget’s success provided immediate clarity for the director group to sensemake and adapt in line with the leader’s intentions. The leader maximized influence.

Summary of Results

A qualitative, constructivist grounded theory study was designed and conducted to answer four research questions:

1. What perceptions occur within executive leaders during sensemaking in a complex, real-world healthcare environment? (RQ1)
2. What cognitive processes occur within executive leaders during sensemaking in a complex, real-world healthcare environment? (RQ2)
3. What do executive leaders consider when attempting to maximize their sensegiving influences in complex circumstances? (RQ3)
4. How do executive leaders attempt to maximize their sensegiving influences in complex circumstances? (RQ4)

Seventeen executive leaders participated in this qualitative study that explains how leaders maximize influence in complex health care. Participants reportedly experienced complexity characterized by rapid change, unpredictable events, and volatility of outcomes. The research yielded rich information about executive leaders' perceptions (RQ1) and cognitive processes (RQ2) during sensemaking in a complex, real-world healthcare environment. Participants reported multiple, simultaneous or high-frequency heat experiences causing perceptions of dissonance and ambiguity that pushed them into explicit sensemaking about complexity. During sensemaking, the executive leaders used cognitive processes, such as paying attention, information seeking, framing, judging, social construction, refinement of mental models, and problem solving (RQ2) from which perceptions of complexity contributors and the nature of complexity emerged (RQ1).

The leaders made sense of influence in complexity, which manifests through how the executives perceived enacting roles and practices, which emerged as role archetypes

and associated leadership practices and behaviors. Outcomes were assessed and evaluated according to how closely they aligned with each leader's intended outcomes.

The leaders discussed their perceptions of their influence and how and why building a foundation for intended influence is important. Part of foundation building includes way the leader develops wisdom and competence about the healthcare landscape, the organization, and its people. Developing trust was also a key piece of building a foundation that reinforced openness to sensegiving. Finally, leaders described experiences of sensesight, or an intuitive or insightful cognitive response arising from sensemaking about sensegiving that informs practice and maximizes the leader's potential influence toward an intended outcome.

Chapter 5: Discussion

Introduction

The purpose of this qualitative research was to explain how executive leaders in health care make sense of a complex environment and attempt to maximize their influence within the complexity. A constructivist grounded theory study of 17 healthcare executives theorizes about the leaders' cognitive processes and associated leadership practices. The resulting model, maximizing influence, explains how executives mediate complexity using a foundation of influence and sensesight. The study enhances the understanding of the dynamic between complexity and the leader's cognition, practices, and outcomes, which may aid other executives looking to lead more effectively in a complex environment.

Maximizing influence is a conceptual model that examines executive sensemaking and sensegiving. As a term in the study, maximized influence is a leadership outcome that aligns to the greatest degree possible with the leader's intended outcome, all variables considered. The model provides broad information on cognitive processes and focuses on how leaders attempt to effectively sensegiving.

The major finding of the study, called sensesight, is the leader's experience of insight about how to maximize influence during a situational demand. Chapter 5 presents the theoretical model and discusses implications, summarizes the research and exposes limitations, and concludes the dissertation with recommendations for future research.

Summary and Implications of Findings

Health care reform is a set of staged regulations that fundamentally change expectations for patient outcomes and federal reimbursement for patient care. To respond, executives must transform the entire business model of the healthcare systems they serve. The new demands worsen the complexity in an already complicated field and create significant challenges to organizational change and improvement.

Maximizing influence is an emerging theory of how healthcare executives make sense of complexity and attempt to influence people to the greatest extent possible in situational demands. One way leaders can maximize influence is through sensemaking emergence (see Figure 5.1). The model summarizes the experiences of executive leaders as they sensemake and sensegive in complexity. It includes internal and external processes and elements that affect the leader's understanding and their actions in the environment.

Model overview: Figure 5.1 illustrates the currents, cycles, and flow of sensemaking and sensegiving within the maximizing influence model. The central pillar is the leader's foundation (see center). Building a foundation consists of wisdom and competence and developing trust, which rely on refining mental models and emotional intelligence. The leader develops trust through demonstrated competence, enacting roles, and keen emotional intelligence. The leader uses wisdom and competence to assist their sensegiving as they fold conversations back in the intended direction. Much of this is routine, particularly in typical daily activities.

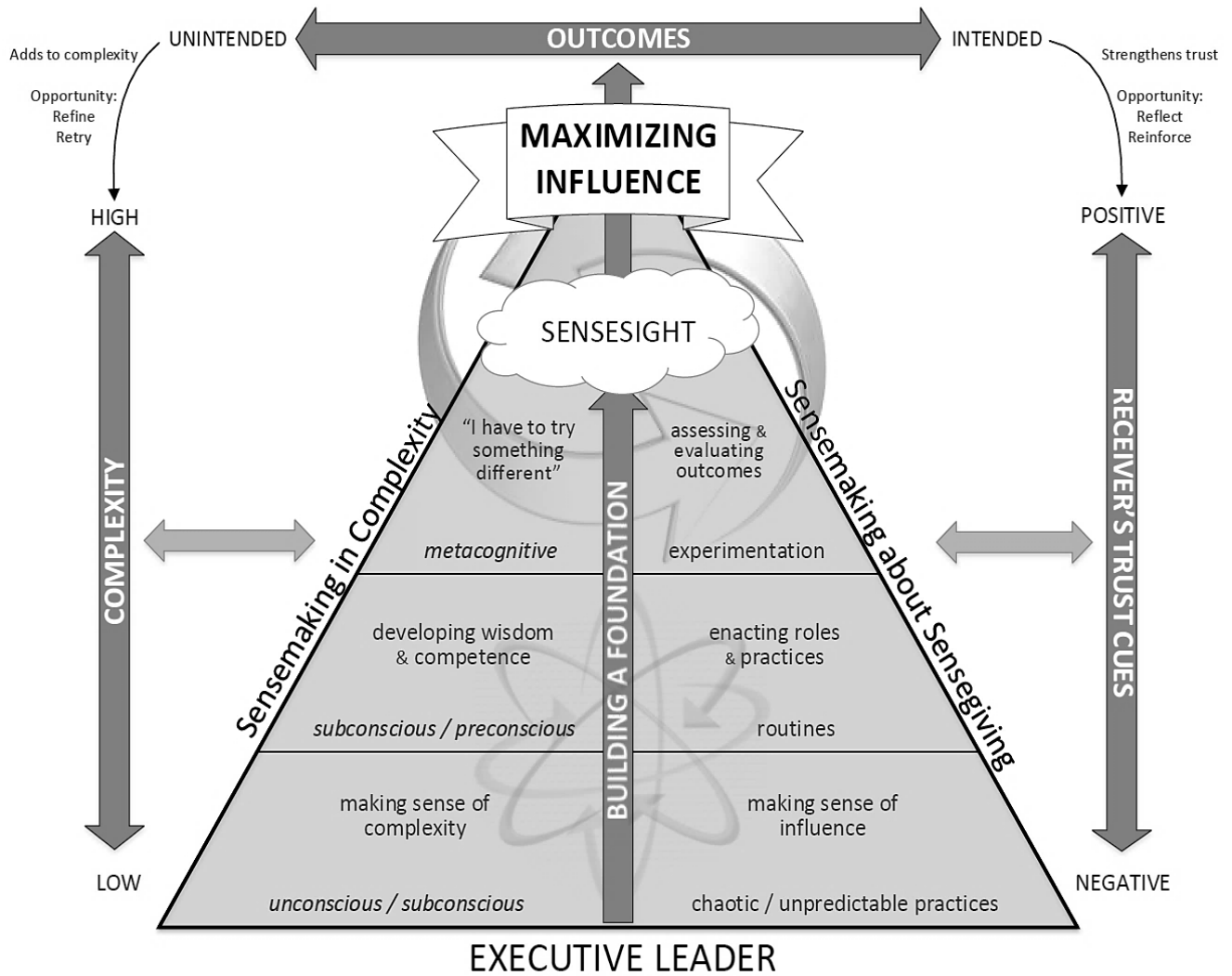


Figure 5.1. Conceptual Model of Maximizing Influence and Sensesight

The leader interprets trust and outcomes through positive and negative cues that aid the leader’s sensemaking about sensegiving reception (see right). Situational demands of high complexity and negative trust cues challenge leader sensemaking and sensegiving, causing more intense heat experiences. In such situations, sensemaking processes coalesce using the foundation to recursively elevate thinking to higher-level consciousness and cognitive processes (see center). Moving up the figure, the interplay and convergence creates fertile ground for sensesight emergence. The process supplies

insight into the complexity of the environment and the situational demand. Subsequently, sensemaking informs practices that increase the likelihood of maximizing influence and intended outcomes (see top). Finally, the model results in a continuum of outcomes. Unintended outcomes provide opportunities for the leader to refine mental models and receive sensegiving, while intended outcomes allow the leader to reflect and reinforce mental models that are likely to work in the future.

Maximizing influence. Sensemaking and sensegiving are ongoing and recursive processes and have sequential properties, some of which are interrelated (Weick, 1995). Maximizing influence relies on sensemaking and sensegiving processes and therefore is ongoing and recursive, with critical sequential elements. This section uses sequential framing to explain the model. However, the model is best understood as a confluence of interrelated processes. Maximizing influence dwells in cycles of devolving and evolving clarity, and varying levels of consciousness that eventually yield intuition or insight.

Maximizing influence begins in the context of complex health care with leaders making sense of complexity. The category describes leaders' perceptions of heat experiences, or challenging situations that create cognitive dissonance and ambiguity. Heat experiences heighten sensemaking (Petrie, 2015). The leaders in this study often shared similar descriptions and characterized complexity as multiple, simultaneous or high-frequency heat experiences.

The theme, multiple simultaneous or high-frequency heat experiences, summarizes executive leaders' perceptions of complexity, its effects, and their concerns (RQ1). Leaders were concerned about the challenges complexity poses to their own understanding and the understanding of others about the direction of health care, the

organization, and the current state of affairs. Executives also expressed concerns over complexity at the frontline, the risks it poses to patients, and their role in risk mitigation.

The heat experiences pushed leaders into explicit sensemaking about complexity, supported by cognitive processes to reduce dissonance and increase understanding and meaning. The leaders used salient cues and retrospection to compare current circumstances to existing mental models. The way they spoke about complexity indicated progressive sensemaking, characterized by cycles of dissonance resolution and re-initiation. Ambiguity cleared only to resurface as the leader faced new questions or heat experiences that destabilized their understanding or direction. The phenomenon was present in high-level conceptual modes about the environment and micro situational demands.

The leaders were beyond a stage of surprise about experiencing complexity in the environment. Leaders had reached a point of acceptance and maybe desensitization. However, all were concerned over the state of health care and the effect on their organization and its people. Situational demands secondary to the complexity fueled these concerns, spawned by the health care reform, complex adaptive systems, and other environmental complications.

Multiple, simultaneous or high-frequency heat experiences manifests between the work of value reform and the “under-pressure” situational demands of regular business. The theme addresses situations that executives perceive as complex and their associated sensemaking. These situations caused cognitive dissonance and ambiguity within the leader. According to the literature, dissonance and ambiguity are often the cause and result of heat experiences and increase the probability of explicit sensemaking (Weick et

al., 2005; Klein et al., 2006b). Ambiguity, dissonance and resistance among groups in the organization were also commonly reported by participants; which also presented opportunities and challenges for leader sensemaking (Weick, 1995).

Cognitive dissonance existed for leaders and for stakeholders in several of the reported heat experiences and often manifested in an acknowledged need to change yet a desire to remain the same. The executives set new expectations that met disagreement and resistance. Experiences of disagreement and resistance were echoed in other reports of dissent among subordinates. There is resistance to change in health care. Most executives reported cultural challenges centered on a lack of collaborative social interaction to construct the new reality (Weick, 1995), causing further ambiguity and dissonance.

Challenges causing dissonance and ambiguity were so prevalent and similar that although contextual elements varied, experiences of complexity were nearly ubiquitous among peers. They explained that ambiguity in the environment created confusion. By using language like, “half the rules don’t make any sense,” executives showed dissonance between the regulations and how to operationalize the required changes. This also surfaced during the focus group of five executives when all displayed nonverbal head nods as they related to each other’s experiences in complex circumstances.

The making sense of complexity category adds to the body of existing knowledge that leader sensemaking is not only challenged in singular complex situations but also by multiple complex situations. A mix of major global changes and situational demands reportedly cause higher amounts of complexity and heat experiences than other industries. Although this seems obvious, it is central to the practical challenges leaders

face daily as they attempt to maximize their influence and provides context to answer the related research questions (see RQ3 & RQ4).

The complexity of current health care places the executive leader as a fulcrum of balance between a complex environment, fragile relationships, and critical improvement efforts. Leaders looked for ways to synthesize complexity and limit the rate of change for frontline staff. However, these attempts to simplify often resulted in distortion of purpose as many people in the organization concluded all changes were to cut costs. The executive leader must observe and attempt to correct for the interplay between people and groups as the complexity produces instability and volatility that counters improvement efforts (Burns, 2001; Maillet et al., 2015; Zimmerman et al., 2001). However, participants in this study expressed ongoing challenges with this balance, and particularly sensegiving about the major changes at hand.

Leaders in this study described challenges building relationships with physician stakeholders as they attempted sensegiving and were met with resistance. Resistance to change is not surprising as individuals often reject or avoid situations that cause cognitive discomfort (Festinger, 1957). Executives tried to implement change and hold physicians accountable to new expectations, while still being sensitive to the physicians' experience of dissonance and supporting them with new technology and process infrastructures.

Many physicians feel health care reform has shifted executives' attention away from patient care toward complicated documentation logistics and reimbursement structures (Haugen & Rosenfeld, 2016). Executive leaders can attempt to meet new regulations and improve value by instituting changes in processes and expectations of physicians, adding labor-intensive responsibilities (Burns, 2001; Krichbaum et al., 2007;

Maillet et al., 2015). This was clear in leaders' descriptions of implementing electronic health records and other technology. These experiences were wrought with resistance and chaos resulting from dissonance between new computer systems functionality and existing clinical mental models. The changes distracted clinicians and took time away from patient care, which can conversely undermine value. Attempts to improve or simplify operational processes can paradoxically worsen complexity yielding more unpredictable outcomes (Burns, 2001; Maillet et al., 2015; Zimmerman et al., 2001).

The leaders assessed and evaluated outcomes of their practice through their explicit judgements or their descriptions of intentions or regrets. Outcomes were organized into loosely coupled intended/unintended outcomes and maximizing influence and shadow influence. Mixed outcomes were most often reported, and vague continuums began to appear, yet outcomes were not necessarily polarized or mutually exclusive.

The way leaders made sense of complexity affected their process of making sense of influence, since experiences and perceptions of complexity posed challenges to their leadership practices. Participants described enacting roles and practices, which included routine practices that helped increase the likelihood of intended outcomes. The routine practices relied on retrospective reflection regarding what had worked in the past, which strengthened mental models and fortified the leader's foundation. Practices were action and language based and most often had major elements of sensegiving.

The practices differentiated into groups according to the intended purposes behind the actions, which were abstracted into archetypal roles. Some roles emerged directly from in vivo codes, like seeker, facilitator, and marketer/damage controller. Roles

seemed to be more complex mental models, made up of combinations of lesser mental models about practices.

Participants played distinct roles depending on the situational demands. The alignment of the role to the demand more predictably influenced as intended. The agility and adaptability of leaders to play different or simultaneous roles in various situational demands also appeared to improve chances of intended outcomes. In abstract, the participants clustered practices around certain purposes as they tried to mediate complexity through their influence.

Participants assessed and evaluated outcomes based on the alignment with their intent and discussed their influence in terms intended and unintended outcomes. Intended outcomes tended to inform and reinforce routines of enacting of roles and practices that increased the likelihood of future intended outcomes. Most leaders had responses to unintended outcomes, such as self-reflective learning, damage control, and more attempts at sensegiving. These actions received feedback that retroactively build their foundation, presenting an opportunity to improve their practice and chances at future intended outcomes.

Leaders in this study improved their sensemaking and sensegiving by building a foundation for intended influence. The category includes the themes developing wisdom and competence and developing trust. Developing wisdom and competence relied on the seeker role as executive leaders sought “deep understanding,” “insight,” “wisdom,” and “knowledge,” (#12, p. 4, 9; #17, p. 7) about themselves, the external environment, the organization, and its culture and people.

“Wisdom and insight,” was a descriptor one participant used to explain refining mental models through self-reflection to ground their thinking and actions in accurate perceptions (#12, p. 4). The foundation included perceptions of environmental complexity and the organization’s mission, vision, values, strategic priorities and culture. Developing wisdom and competence relies on advanced elements of emotional intelligence including self-reflection (Goleman, 1999) and management (Mayer et al., 2003). Leaders use cognitive and metacognitive processes and information seeking to consciously activate sensemaking to refine their mental models and emotional intelligence.

It was clear from the study data that maximizing influence was broader than Weick’s (1995) and other experts’ definitions of sensemaking and sensegiving. Sensemaking and sensegiving cannot be viewed as separate processes, nor as two sides to the same coin (Gioia and Chittipeddi, 1991; Weick et al., 2005). Instead, sensemaking and sensegiving complement and feed each other in a recursive process as individuals use language to negotiate and construct meanings through discourse (Prawatt & Floden, 1994; Weick et al., 2005).

While the traditional characteristics of sensemaking and sensegiving held true for this study, complexity threw leaders into near-constant states of explicit sensemaking about complexity and sensemaking about sensegiving. This pushed most leaders outside of simple discourse to enact roles and practices that contextualize the environment, attempting to mediate complexity. This contextualization relied on the leader’s foundation, which incorporated trust building and culture change strategies, implementing tools and processes, and refining their mental models and emotional

intelligence. The leader's foundation became the essential support through which all chaos flowed, purposefully to redirect understanding and influence as intended. Leaders began metacognitive thinking about their sensemaking and sensegiving and acted to improve it. They sought contextual variables they could actively influence that would lower the threshold of sensegiving effort and acceptance in complexity.

Theoretical sensemaking and sensegiving are described on a quality gradient which is useful for understanding building a foundation. Klein et al. (2006b) point out that sensemaking is not a skill and therefore cannot be trained in a traditional sense. However, a gradient exists from novice to expert sensemakers (Klein et al., 2007). Novice sensemakers have difficulty finding the relevance of essential information and tend to more often find irrelevant information as important. Expert sensemakers seem to have a richer, more varied set of frames and are more sensitive to situational context. Expert sensemakers enhance their mental models more readily, reframe more often, have more ideas for response, and have greater overall insight (Klein et al., 2006b; Klein et al., 2007; Smerek, 2009).

The quality of sensemaking also affects sensegiving practices. Sensemaking and sensegiving cannot be viewed as separate processes, nor as two sides to the same coin (Gioia and Chittipeddi, 1991; Weick et al., 2005). Instead, sensemaking and sensegiving complement and feed each other in a recursive process as individuals use language to negotiate and construct meanings through discourse (Prawatt & Floden, 1994; Weick et al., 2005). Therefore, the quality of sensemaking enhances the quality of sensegiving.

The better a leader is at sensemaking and sensegiving, the better they can link performance to goals and create new, shared mental models and influence employee

metacognition (Lord & Emrich, 2001). It is through sensegiving that the leader attempts to shape meaning and context behind the work (Narayanan et al., 2011). Therefore, the leader must be able to assess themselves and their subordinates to understand how their leadership practices affect the dynamics of understanding, influence, and performance (Lord & Emrich, 2001; Narayanan et al., 2011). Maximizing influence explains how complexity affects this process. The model supplies a richer description of leaders' efforts to proactively lower the threshold of sensegiving effort and reception.

Leaders also developed a foundation to improve their ability to “react swiftly and thoughtfully” during situational demands. During high complexity and negative trust cues, the foundation allowed them to more readily enter higher-level sensemaking and often resulted in a meta-cognitive question or statement: “I have to do something different.” The statement began as an intuitive or experimental response where ideas about how to adapt sensegiving to the complexity resulted in a new phenomenon called sensesight that resulted in maximizing influence.

Maximizing influence and sensesight. Several participants in this qualitative study reported that during some complex situational demands explicit sensemaking about sensegiving began as they tried to act “swiftly” and “thoughtfully.” This was usually preceded by past attempts at sensegiving resulting in unintended outcomes, or perceptions of negative verbal and nonverbal cues from the receiver(s) of their sensegiving. Early in the phenomenon was a recognition of “needing to do something different.” This was followed by information seeking, use of emotional intelligence, and self-reflection to evaluate ongoing outcomes and center on their foundation.

The sensesight experience was mediated by the quality of the leader's foundation and the complexity of the situation. Higher quality foundations allowed quicker processing and adaptation of roles and practices, enabling the leader to "do something different." A high-quality foundation supplied a great repertoire cognitive and EI tools to aid their sensemaking and sensegiving. This increased the probability that the leader would experience sensesight. The sensesight experience was often transient and was characterized by ideas, insight, or intuition that guide the leader's sensegiving practice and yielded maximized influence. Conversely, the complexity of the situation had a negative mediating factor on outcomes.

Sensesight did not always result in intended outcomes, instead, sensesight increased the probability of an intended outcome by maximizing influence. A maximized influence outcome was one that aligns with the leader's intended outcome to the greatest extent possible, considering complexity as a negative mediating factor. Therefore, maximized influence can have unintended outcomes, yet these outcomes are still more desirable than other unintended outcomes where influence was not maximized. Finally, ideas arising from sensemaking about sensegiving that do not maximize influence cannot be considered sensesight according to the definition grounded in the data of this study.

Implications for leadership practice. Executive leaders in contemporary health care must make significant changes to their business structures in response to health care reform. Reform is a shift from volume reimbursement to value reimbursement. While the purpose of this change is to improve the quality of care to patients and to control the growing costs of care in the U.S., leaders must change the underpinnings of their operations without interrupting current business.

Health care has always been a complex field, yet the paradigm has increased complexity exponentially (#1-17). As complexity grows, traditional approaches to management like command-and-control have lost their relevance and efficacy (Porter-O'Grady & Malloch, 2015). Leaders are left trying to influence chaotic, multivariable, rapidly changing, and unpredictable situations, toward intended outcomes. Maximizing influence provides insight on how leaders make sense of complexity in health care, what they can control about their own practice and development, and how they attempt to maximize their influence during situational demands.

Leaders try to decrease ambiguity and dissonance by sensemaking in complexity through seeking information, looking retrospectively, social interaction, prioritizing, and centering on their foundation. However, ambiguity and dissonance often only evolve through the leader's ongoing sensemaking, yet they often "don't know the answer." So, leaders try to maximize their influence using distinct roles: the seeker, that gathers information to see "the real stuff" and the planner/provider, that synthesizes and plans goals and change, and allocates resources. Leaders use the driver/navigator role that implements plans and drives toward goals, while navigating fragile relationships and politics. They use the role of facilitator/enabler, that enables others to solve problems and make decisions, while removing barriers to progress. Another role is the judge/justice, that attempts to balance culture and values. The last thematic role is the marketer/damage controller, that attempts to package their sensemaking, sell the why through their sensegiving, and clean up the consequences of inevitable misunderstanding.

The roles and practices help leaders increase the probability of intended outcomes and maximized influence, yet results vary. They improve results by building a

foundation for their influence, which is built on the quality of their mental models and emotional intelligence. They information seek, self-reflect, and deeply contemplate their values and practice, and the mission, values, and strategic plan of the organization. They learn about and care for the people and culture of the organization. Leaders develop self-reported trusting relationships through vulnerability, openness, transparency, and caring.

A leader's foundation mediated the probability that they would develop routine practices that produce frequent intended outcomes or maximize influence. However, routine practices only took leaders so far. Complex situational demands posed additional heat experiences and explicit sensemaking about sensegiving. Sensesight, an experiential phenomenon for leaders, was when insight or intuition about the situation and the leader's sensegiving, guided the leader towards practices that maximized their influence.

The detailed data from this study provides information to leaders that are seeking to become better influences. While there are no formulas for sensesight and maximizing influence, the leader can control some of the precursory elements that make sensesight emergence and maximizing influence outcomes more likely. Leaders can develop their foundation, be present to the situation, and be open to experimentation or "trying something different," during complexity.

Leaders' inclination towards experimentation initially sounded haphazard. However, in IBM's 2010 study of 1,500 CEOs, most said creativity is the most important success factor for leaders in complex environments. The experimentation leaders described in response to "something different," was not random, it was intelligently creative. This intelligent creativity may be a hallmark of sensesight and the leader's ability to be creative may be mediated by their foundation.

Executive leaders in health care subconsciously and consciously build a foundation that improves the quality of their sensemaking, sensegiving, and emotional intelligence. Leaders improve their foundations constantly, yet the data indicates this is often a subconscious learning process. However, executives can more actively and effectively build a foundation that improves their leadership by using conscious metacognitive processes. Leaders accomplish this through self-reflection and consciously building competency around their leadership practice and the organization's philosophical underpinnings. Framing and intention are essential to the process. The intention of explicitly building a foundation to improve cognitive processing in situational demands can improve the quality of foundation by enhancing mental models and emotional intelligence. This moves leaders into the realm of expert sensemakers and thereby enhances leadership outcomes during sensegiving. Leaders reported the key elements of the foundation increase the probability of creative insight that manifests as sensesight. Sensesight increases the likelihood of acting "swiftly and thoughtfully" and maximizes influence.

Being better influencers in complex health care means leaders increase the probability of outcomes that align with their intentions. This implies leaders will be more effective at assisting the organization in reaching its goals towards value improvement. People will receive better care at a lower overall financial burden to self and tax payers if organizations are able to reach the goals of health care reform and value improvement.

Limitations

This study used qualitative grounded theory as its method of inquiry. The methodology is ideal for explaining the experiences and processes of psychological and

social phenomena (Creswell 2014; Flick; 2014). However, purposive sampling technique limits the transferability of the research (Creswell 2014; Flick; 2014).

The maximizing influence, while substantive, is a developing theory and has not reached saturation. Data collection methods, such as interviewing, also limit the study. Issues with the participants' and researcher's understanding and interpretation of questions and answers can cause inaccuracies in the data (Charmaz, 2008). The researcher is also a professional in the healthcare field and has experienced the phenomenon of interest. Although member checking, additional interviews, and a focus group were used to improve credibility and trustworthiness, it is possible the researcher's experience introduced bias in the data collection, analysis, and interpretation.

Recommendations for Future Research

Sensegiving in leadership must not only assist another individual or group in understanding concepts, but also influence that person or group toward a desired behavior (Weick et al., 2005). Observations or interviews with executives' subordinates were not included in this study, so outcomes were judged by the executives' assessments and evaluations, or by the researcher within the context of the participants reports. Future research should include additional measures of outcomes, including observations of executive/subordinate interactions and subordinate interviews. This might also provide additional insight regarding other mediators to sensegiving that are internal to the receiver.

The study context, complexity, was confined to health care. Complexity is a broad term, encompassing a state of circumstances (Zimmerman et al., 2001). Yet even within health care, the nature of complexity varied greatly depending on the situational

elements. To explore applicability of Maximizing Influence in other fields, additional study is warranted.

This qualitative grounded theory study had wide breadth of data and moderate saturation. Focused studies on the developing theory could provide stronger trustworthiness, credibility, and a deeper understanding of how the phenomenon works, and its implications for practice. The understanding of the relationship between complexity, sensesight, and maximizing influence could also benefit from further inquiry.

Conclusion

This qualitative inquiry examined how complexity affects the ways executive leaders in health care understand the environment and how they attempt to shape the thinking of people in the organization. The theoretical models of sensemaking and sensegiving were used as a foundation for the grounded theory study. Executive leaders use the cognitive process of sensemaking to understand environments and situations (Weick et al., 2005). Sensemaking uses language to construct meaning, which the leader then uses to frame circumstances and action. Through a process called sensegiving, the leader uses their framing to influence the way others think, which is one way the leader impacts behavior in the organization (Lord & Emrich, 2001; Narayanan et al., 2011).

Complexity and the pace of change have grown in American health care over the past 20 years while leadership practices have been challenged with inconsistent results (Maillet et al., 2015; Dinh et al., 2014). The primary drivers of complexity and change include rising patient and community needs, advances in best practice and technology, and health care reform (Maillet et al., 2015; Delmatoff & Lazarus, 2014). Health care reform intends to improve the quality of patient care and contain costs of the U.S. health

care system. Improving quality and decreasing costs is also referred to as value. Most organizations philosophically support value-enhancement; however, it requires radical rethinking and redesign of the fundamentals of healthcare delivery and reimbursement (Maillet et al., 2015; Delmatoff & Lazarus, 2014).

The heavily regulated paradigm shift now heightens the complexity of the environment and poses significant challenges for executive leaders (Maillet et al., 2015; Delmatoff & Lazarus, 2014). Combined with the other complexities of health care, executive leaders face a modern conundrum: how to understand the changing environment with its many confounding variables and effectively lead toward value improvement (Maillet, Lamarche, Roy, & Lemire, 2015; Ridic, Gleason, & Ridic, 2012).

Health care organizations are complex (Burns, 2001). According to complexity science, complexity is unavoidable and natural, characterized by chaotic and rapidly changing circumstances, and unpredictable outcomes (Burns, 2001; Zimmerman et al., 2001). Organizations naturally develop complexity since they are made up of a group of individuals with individual and group needs, that unpredictably behave, self-organize, and adapt to situations (Rouse, 2008). However, paradigm shifts, such as health care reform, exacerbate complexity and make it even less manageable (Burns, 2001; Zimmerman et al., 2001).

Complexity makes sensemaking and sensegiving processes more difficult and explicit (Weick et al., 2005). Although the processes are basically similar amongst individuals, context plays an important role in outcomes (Weick et al., 2005). Different environmental contexts, for instance different professional environments, can make the processes somewhat unique to a homogenous group in similar circumstances.

The sensemaking and sensegiving processes in real-world health care are not sufficiently understood, nor the interplay of complexity, cognitive processes, and practices of the executive leader (Dinh et al., 2014). Understanding the relationship between real-world complexity, critical cognitive factors, and leadership practice could have implications for other leaders experiencing similar pressures. Therefore, a grounded theory study of executives in large healthcare systems was conducted to develop an understanding of their sensemaking and sensegiving processes.

Methodology. The purpose of the study was to understand the perceptions and processes that occur within executive leaders as they make sense and lead within a complex real-world healthcare environment. The study sought to answer the following research questions:

1. What perceptions occur within executive leaders during sensemaking in a complex, real-world healthcare environment?
2. What cognitive processes occur within executive leaders during sensemaking in a complex, real-world healthcare environment?
3. What do executive leaders consider when attempting to maximize their sensegiving influences in complex circumstances?
4. How do executive leaders attempt to maximize their sensegiving influences in complex circumstances?

A qualitative grounded theory study was designed to explore the phenomenon and answer the research questions. Seventeen executive leaders participated in this study. Participants were purposefully recruited based on these criteria and their likelihood to inform the inquiry. This was accomplished through purposive sampling. Purposive

sampling selects participants based on substantive criteria that homogenizes the sample, increases validity, and best informs the research questions (Flick, 2014; Creswell, 2014).

Participants included typical executive leaders, considered tenured executives in large healthcare systems. The participants had minimally 2 years of experience in complex health care to allow time to experience the phenomenon of interest. Theoretical sampling was employed throughout the study. Theoretical sampling is an iterative process that identifies concepts as patterns emerge from the data. The process informs further sampling and data collection, seeking a saturation point when no new concepts emerge (Harris, 2015).

To address the element of complexity, leaders were executives of major urban healthcare systems in Upstate New York. Initial participants were C-suite executives in large urban health systems, including at least one hospital of 400-900 acute-care beds and included ambulatory, surgical, and emergency services. Through theoretical and snowball sampling, other executive roles with similar responsibilities and experiencing similar complexity were included. Snowball technique asks participants to recommend additional participants that may fit the study criteria (Creswell, 2014; Handcock & Gilet, 2011), which occurred at the end of interviews. Other sampling was accomplished via word of mouth and email through the researcher's personal and professional networks.

The study employed a constructivist approach to grounded theory. Constructivist methodology allows for the emergence of an explanatory theory through constructed truths relative to the researcher and participants (Charmaz, 2008). Data collection was achieved through semi-structured interviews and a focus group. Interviews were face-to-face, approximately an hour long, and took place in a location convenient to the

participant. In rare cases, telephone interviews were conducted if scheduling prohibited a face-to-face meeting. Interviews were conversational and guided by an evolving interview protocol (see Appendices C, E & F). The interview protocol was modified according to patterns and themes emerging from the data, which is indicated by the theoretical sampling model.

Towards the end of the study, a focus group of five executives was convened to deeply explore the emerging concepts. This increased the credibility and trustworthiness of the data. A follow-up interview with an elite participant also contributed to the credibility and trustworthiness of the data.

Executives signed informed consent prior to participation (see Appendix B). For this study, the interviews and the focus group were recorded using two electronic devices and a professional transcriptionist will transcribe the recordings. All recordings and transcripts were kept under lock-and-key or on a password-protected device owned and secured by the researcher.

Data Analysis. Grounded theory requires data collection with concurrent analysis (Flick, 2014). Data are analyzed concurrently to guide further sampling or data collection that informs the discovery and development of the patterns (Alemu et al., 2014; Charmaz, 2014; Engward, 2013; Harris, 2015; Flick, 2014). Memos and coding are used to analyze transcribed interview data and identify the patterns (Alemu et al., 2014; Flick, 2014). Constructivist grounded theory uses three types of coding: open, focused, and theoretical.

Open coding identifies words and phrases in the raw data that represent thoughts and feelings of the participant. Focused coding looks at the open codes for frequency and

themes and looks for new ideas and how concepts group into categories. Finally, theoretical coding looks at the concepts and categories and hypothesizes how they relate.

Each layer of coding abstracts ideas into concepts, concepts into themes, and builds categories that construct a theoretical framework through their interrelatedness (Charmaz, 2008; Evans, 2013). Grounded theory uses constant comparison of emerging patterns against the raw data and seeks new data where appropriate to improve confidence in findings and the emerging theory (Alemu et al., 2014).

Alemu et al. (2014) and Bringer, Johnston, and Brackenridge (2006) recommend utilizing computer-assisted qualitative data analysis software (CAQDAS) for organization and facilitation of coding, memo writing, and integration, to enhance credibility. The researcher used CAQDAS to assist the data analysis. Further analysis was done on paper. During analysis, memos assisted the researcher in recursively comparing the emerging concepts and theory against the empirical data to improve credibility and validity (Alemu et al., 2014).

In addition to field notes and memos, the researcher used member checking to increase trustworthiness (Creswell, 2014). Member checking is a process of obtaining feedback from the participants during the interview, immediately after, or long after the initial interview to validate the emerging concepts and theory. The process supported the constant comparative method and construction of the theory. Preliminary analysis informed the need for member checking, which was conducted as necessary to improve credibility while attempting to reach theoretical saturation, when new data and insights cease (Flick, 2014). The constructivist grounded theory methodology allowed for the emergence of an explanatory theory, called maximizing influence, that develops the

understanding of sensemaking and sensegiving processes of the executive leader within the context of complexity.

Maximizing influence. Executive leaders in this qualitative study described their thought processes and perceptions about the complexity of modern health care. Leaders described common roles they play in the context of complexity. Leadership practices dimensionalize the roles, while perceptions and judgements of outcomes provided opportunities for leaders to self-reflect.

Leaders considered their foundation of influence and described attempts to improve their mental models and emotional intelligence. The efforts resulted in routine practices with a high probability of intended outcomes or maximized influence, yet the results varied. Misalignment of the leader's foundation and the demands of situational complexity was a common reason for unintended outcomes and missed opportunities of maximized influence.

Dissonance and ambiguity characterized by unintelligible conclusions or confusion are common among leaders and followers. Leaders attempted to mediate complexity through several subconscious and conscious strategies including building trust, building wisdom and competence, and enacting roles and practices. These activities often allowed the leader to lower the threshold of sensegiving influence. However, leaders also faced with situational demands that routine roles and practices were insufficient to address.

The situational demands threw leaders into an explicit process of sensemaking about sensegiving. The leaders attempted to process and respond "thoughtfully" and

“swiftly”, and to “know the answers.” However, the more complex a situational demand was, the more likely the situation would yield an unintended outcome.

To avoid unintended outcomes, the leader’s sensemaking about sensegiving drew upon their foundation of influence to creatively micro-strategize about how to maximize their influence. Beyond subconscious sensemaking and routine practices, leaders sometimes experienced a phenomenon called sensesight. Sensesight emerged from explicit sensemaking about sensegiving when “something different was needed.” Sensesight was a cognitive experience of guiding insight that affected the leader’s sensegiving practice and allowed them to maximize influence during situational demands.

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Appendix A

Letter of Invitation

Dear Executive,

Request: I am conducting doctoral research that may improve our understanding of how complexity affects leaders and their leadership practice. **I would like the opportunity to interview you for 60 minutes at a place of your convenience.** The research may help executives lead more effectively in the current healthcare environment.

Details: The study seeks to understand how executive leaders in health care make sense of a complex environment (sensemaking) and how they attempt to influence others by redefining their understanding of organizational reality (sensegiving). While you may or may not agree you experience complexity in your daily work, commentary and analysis regarding the topic saturates literature in the field.

Even successful leaders use language indicative of unpreparedness, anxiety, confusion, ambiguity, and even despair when describing leadership in complex healthcare environments. Situations like this present explicit, researchable processes. Of particular interest are cognitive processes that occur within the leader as they grapple with understanding the environment and social-cognitive processes between the leader and members of the organization as they attempt to maximize their influence.

Any identifying information about you or your organization will remain confidential and undisclosed. **If you are interested in helping, please contact me using the information below.**

Thank you for your time and consideration, and for any time you can participate.

Sincerely,



Ryan P. Clapper, MBA-HC, RN
Doctoral Candidate
St. John Fisher College
Ed.D. Program in Executive Leadership

rpc03372@sjfc.edu

Appendix B

St. John Fisher College INFORMED CONSENT FORM

Title of study: Sensemaking and Sensegiving of Executive Leaders in Complex Health Care

Name of researcher: Ryan P. Clapper

Faculty Supervisor: Theresa L. Pulos, Ed.D. Phone for further information:

Purpose of study:

The purpose of the study is to explore how executive leaders attempt to make sense of a real-world, complex healthcare environment. The study will also develop an understanding of how insight emerges for executive leaders as they attempt to maximize their influence.

Place of study: a mutually agreed upon location

Length of participation: 60 minutes for initial interview. If needed, a 15 – 30 minute follow up conversation/interview may be scheduled for checking accuracy and further data collection.

Method(s) of data collection: Semi-structured interviews, digital audio recording, field notes, memos

Risks and benefits: The expected risks and benefits of participation in this study are explained below:

The purpose of the study is to understand the perceptions and processes that occur within executive leaders as they make sense and lead within a complex healthcare environment. Other executive leaders have associated these perceptions and processes with feelings of confusion, anxiety, and ambiguity. As a participant, there exists a potential to experience similar feelings of discomfort during the interview process. There is also a time commitment of at least 60 minutes, with the possibility of a follow up interview or conversation for additional information and clarification.

Our meetings will be scheduled at a time and place of your convenience and you are free to withdraw your consent and participation at any time. If you withdraw from the study, all records and identifiable information will be destroyed immediately. Please bring any questions or concerns to the researcher, Ryan Clapper, and he will attend to them.

Your participation may benefit the fields of health care, executive leadership, and complexity and cognitive sciences. The information provided during our meetings may enrich the understanding of the leadership process in the context of complexity and modern health care. Be advised that the dissertation will be published and related articles may be published and findings presented in academic and professional forums.

Method for protecting confidentiality/privacy of subjects:

All digital audio recordings and transcriptions of interviews will be maintained using a private, locked, and password-protected file and password-protected computer stored securely in the private home of the principal researcher. Electronic files will include assigned identity codes and pseudonyms; they will not include actual names or any information that could personally identify or connect participants to this study. Other materials, including notes or paper files related to data

collection and analysis, will be stored securely in unmarked boxes, locked inside a cabinet in the private home of the principal researcher. Only the researcher will have access to electronic or paper records. The digitally recorded audio data will be kept by this researcher for a period of five years following publication of the dissertation. Signed informed consent documents will be kept for five years after publication. All paper records will be cross-cut shredded and professionally delivered for incineration. Electronic records will be cleared, purged, and destroyed from the hard drive and all devices such that restoring data is not possible. Your information may be shared with appropriate governmental authorities ONLY if you or someone else is in danger, or if we are required to do so by law.

Your rights: As a research participant, you have the right to:

1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
2. Withdraw from participation at any time without penalty.
3. Refuse to answer a particular question without penalty.
4. Be informed of the results of the study.

I have read the above, received a copy of this form, and I agree to participate in the above-named study.

Print name (Participant)

Signature

Date

Print name (Investigator)

Signature

Date

If you have any further questions regarding this study, please contact the researcher(s) listed above. If you experience emotional or physical discomfort due to participation in this study, please contact your personal health care provider or an appropriate crisis service provider (315-251-0600).

The Institutional Review Board of St. John Fisher College has reviewed this project. For any concerns regarding this study/or if you feel that your rights as a participant (or the rights of another participant) have been violated or caused you undue distress (physical or emotional distress), please contact Jill Rathbun by phone during normal business hours at (585) 385-8012 or irb@sjfc.edu. She will contact a supervisory IRB official to assist you.

Appendix C

Interview Protocol

Grand Tour: The shift toward value in health care has exacerbated the complexity and pace of change experienced by leaders and organizations, while both have been challenged with inconsistent results.

1. Why do you think the Grand Tour statement is true?
 - a. Can you describe the healthcare environment today?
 - i. Where is it going?
 - b. Can you describe your organization?
 - i. How does it fit into the healthcare environment?
2. While serving in your current position, are there or have there been any exceedingly complex situations you find challenging, puzzling, or ambiguous?
 - a. Can you describe the situation and your feelings about it?
 - b. How do you make sense out of the complexity? (may open dialogue about complexity in general/abstract terms)
 - i. What are the major variables and systems you consider?
 - ii. What is important?
 - iii. What is hard?
 - iv. How do all the variables and systems interact with each other?
 - c. What are the outcomes?
3. How do you prioritize?
 - a. What influences your thoughts and feelings about priorities?
 - b. Do they change?
4. Do you have a vision for the organization/your service line?
 - a. How did you develop it?

- b. How have you communicated it?
 - c. How do you stay aligned with the strategic plan and other leaders?
- 5. How do you decide your leadership strategy?
 - a. What influences your decision-making?
 - b. What situations cause you to revisit your strategy?
 - c. How might your strategy change over time?
- 6. Do you have concerns about complexity at the frontline?
 - a. If so, how do you address it?
- 7. How do you maximize your influence? (may use scenario from question two)
 - a. In the moment? In the long term?
 - b. How do you know you are influencing the organization as you intend:
 - i. In the moment: What situations? What outcomes?
 - ii. In the long-term: What situations? What outcomes?
 - c. Do you ever influence the organization as you do not intend?
 - i. How do you know?
 - ii. What is your response?
- 8. How would others describe your leadership style?
- 9. Is there anything else you think is relevant that we have not discussed?

Demographics:

Role/Title:

Years in the profession:

Years at this organization:

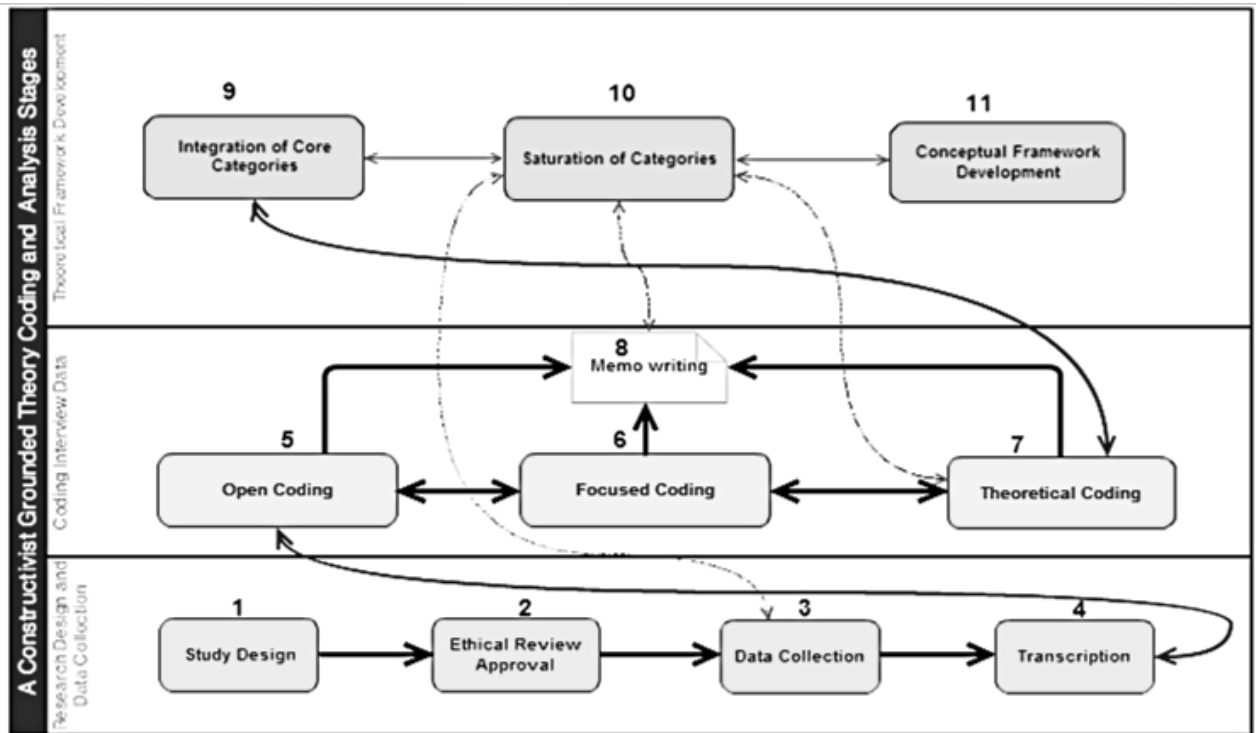
Highest degree attained:

Gender Identity:

Can you recommend any executive colleagues who might be interested in participating in the study?

Appendix D

Research Design and Coding (Alemu et al., 2014)



Appendix E

Focus Group Protocol

How executive leaders make sense and maximize their influence in a complex health care environment — Sensemaking/Sensegiving

Think of a time when a situational demand conflicted with your goal or strategy, particularly when someone or a group was not able to connect the current situation to your vision or intention. You were trying to influence the outcome and you feel you were able to maximize your influence in the situation.

- Immediate or short term issue – situational and you were trying to influence people.
 - Misunderstandings, surprise information, resistance / difference of opinion

Please describe the situation as if you were an observer – no thoughts or feelings, just objective information. Go around the room and have them recite their situations.

What were you thinking as you made sense of the situation?

As you made sense of the situation, were you also getting feedback? What kinds?

- Cues from the individual(s)

What were the challenges? What concerned you and what did you consider?

What did you do to maximize your influence?

- What went through your mind?
- Were there any “ah-ha” moments about how to maximize influence?
- Was intuition involved? How did it emerge? What happened?
- Did complexity of the situation and environment affect the process?

What do you think allowed these ideas to emerge?

Several years ago, a friend of mine had an important meeting coming up and she was anticipating challenges with influencing the outcome, she said she didn't want to "fail" the meeting. I had never thought of a meeting like that before.

- Have you ever "failed" a meeting?
- What happened?
- What didn't happen for you as a leader and as an influencer?

Appendix F

Revised Interview Protocol for Intensive Interviewing

Intro to sensemaking and sensegiving. Discuss the dynamic between sensemaking and sensegiving (recursive). Explain time interval between reflexive practice and strategy development – responding to situational demands.

1. Regarding sensegiving, how do you define successful sensegiving, when you feel you maximized your influence?
 - a. What does it look like for you?
 - b. What are the outcomes?
 - c. How do you know?
 - d. What does the other person say or do? Cues?
2. Can you describe a time when you felt there was a disconnect between where someone was and where you needed them to be and where you felt you "maximized" your influence? Focus on leadership influence, not management.
 - a. What were you thinking about during the situation?
 - i. What were your intentions?
 - b. What was the language you used?
 - c. What were you paying attention to?
 - i. What did the other person say or do?
 - d. Were there any ideas, ah-ha moments, insight or intuition that you had?
 - i. What did it feel like?
 - e. How did you know it was the “right thing at the right time”?
 - f. What were the outcomes?

- i. And did the outcomes align with your intention?
- ii. Any unintended outcomes?

Let's go deeper...

What are some of your leadership values?

What practices do you use to support these values?

How did the insight inform your use of practices?

How were the practices the same or different from what you had done in the past?

How were the practices different from what you would do reflexively or out of routine?

What do you think enabled you to have this insight?