**Integrating a cross-cutting, technology-driven department into a historically divisional**

**bureaucratic healthcare institution**

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**Abstract**

Stevens Medicine has a problem: the hospital adopted an institution-wide technological solution without a strategy to account for the necessary organizational change behind its realization. When fully implemented, the technology generates data on the movement and location of patients, providers, and equipment (Sooyoung Yoo et al., 2018). Comparable institutions have utilized the data to drive improvements in equipment management, employee workflow, and patient experience. While the Chief Executive Officer (CEO) expects to create a new department to facilitate these institution-wide initiatives, the endeavor must account for a historically Divisional structure and culture (Robbins & Judge, 2019). This paper leverages organizational theories across leadership, environmental scanning, organizational change, shared learning, and evaluation to drive the development of a holistic solution.

*Keywords:* Real-time location system, healthcare, organizational change

## Chapter 1: Introduction

**Paper Organization**

To comprehensively address the integration of the cross-cutting real-time location system (RTLS) department, the strategy outlined in this paper synthesizes theories across the organizational leadership space. The strategy holds several objectives that it aims to accomplish. The first objective is to design how this new department effectively integrates and establishes cross-cutting integration of its capabilities into Stevens Medicine. The second objective is to ensure that other departments are enabled to succeed in independent usage of the technology system. The third objective is to demonstrate success for the technology and department through the initial organizational initiatives: reduced emergency department wait times and effective equipment management. Detailing how the strategy understands and fulfills these objectives, the paper's content follows a structure for optimal assessment and organization.

The remainder of Chapter 1 provides further context and background for the problem of Stevens Medicine. Chapter 2 explains how my role and Democratic style best position me as the leader to implement this strategy (Goleman, 2000). In Chapter 3, a multi-framing assessment with Bolman and Deal (2021) helps to elaborate on the organizational understanding so that the designed implementation and integration account for the structural, human resources, political, and symbolic factors. I then utilize a synthesis of Burnes' (2004a) interpretation of Lewin's Planned Approach and Kotter's (1995) Eight-Step Change Model in Chapter 4 to inform and detail a course of action for addressing the problem in a way that meets the objectives and considers the unique organizational understanding. I will also detail how the manner in which this change strategy unfolds lays the groundwork for Lave and Wenger's (1991) Community of Practice to emerge around the new department and technology. With Chapter 5, I integrate

employee surveys, technology utilization metrics, and data from technology-driven initiatives into Kraft's (1997) Benchmarking to evaluate the success of that implementation. Chapter 6 then concludes with a high-level overview of this approach.

**Background**

Stevens Medicine stands as a premier medical institution in the United States. The hospital consists of approximately 20,000 employees, maintains 1,000 patient beds, and practices enough medical services to cover nearly every ailment. Staff often attribute the historical and continued success of Stevens Medicine to the autonomy that individual departments hold. The leaders of those departments express that they feel empowered to leverage their specialized field expertise and avoid the more bureaucratic processes that may come with other structures. For example, the Department of Surgery sees surgeons make strategic decisions for the direction of surgery at Stevens Medicine and the other departments and specialties experience the same. Such has been the way for the 100 years that Stevens Medicine has been in operation.

Recent feedback from staff across departments informed hospital leadership about organization-wide inefficiencies and a lack of cohesive cooperation between those departments. From sharing a limited fleet of medical equipment to the nurses' inability to find that equipment, the issues raised called for something to be done so that providers can focus on practicing medicine and patients can continue to receive the level of medical care promised by Stevens Medicine. With a focus on equipment management, institutional leadership oversaw the installation of a campuswide RTLS.

In subsequent dialogue with the vendor, hospital leadership learned the extent of the system's capabilities. A fully realized application could generate insights about organization-wide patterns and networks from the data generated on the location and movement of providers,

patients, and equipment (Overmann et al., 2021). These insights enabled other institutions to systematically improve patient flow, equipment management, and patient experience.

**Problem**

Such theoretical developments based on the success seen at other institutions do not guarantee success at Stevens Medicine. The RTLS vendor recommends the same best practices adopted by those other hospitals, with the primary one seeing the technology as having a departmental owner. While individual departments could apply the technology within their units and context, the main benefits come from a holistic organizational view. As defined by the CEO, the purpose of an RTLS department would be to gather the organization-wide patterns, assess their implications, and make strategic decisions that impact all departments. Within the context of one of the staff feedback items, the department could use data infusion pump movement across the hospital to develop insights about which departments are falling below their minimum number of required pumps (Martinez et al., 2020). Where to source those additional pumps could then be informed by which departments are above their maximum number of required pumps. From these foundations, an infusion pump management system could be established with automated processes to ensure that all departments are adequately supplied.

At this intersection of intention and capability is where the problem begins. While departments across Stevens Medicine supported the decision to install the RTLS technology for the purported equipment-locating benefits, the concept of a new cross-cutting department was not agreed upon or considered. The CEO of Stevens Medicine stands behind the vendor's recommendation and wants the RTLS department to come to fruition. While considerations of departmental logistics and technical training will be touched on, the primary purpose of this

paper is to use relevant frameworks to understand what such a change is asking of the institution and outline how the change will be effectively implemented within that context.

## Chapter 2: Role and Leadership

**My Role**

With this background and problem in mind, the CEO of Stevens Medicine brought me into the organization to develop this change strategy as the Director of the new RTLS department: Workflow and Asset Strategy (WAS). I have been allocated enough resources to bring on several full-time employees in the initial integration. Reporting directly to the CEO, I have been given the discretion to work across the Divisional nature of Stevens Medicine and to design and implement the change as I see fit (Robbins & Judge, 2019). Having previously worked together at a comparable healthcare system, the executive is familiar with my experience and leadership style.

My time spent with that health system saw me in a department known as Operations Integration, where I was part of an in-house, operations-excellence consulting team that aimed to better unify operations across the institution. Existing as an informal resource available to all departments at that hospital, many of my projects came about through the relationships that I made. The solutions I designed for their problems were then implemented via the coalitions I built. As my time went on with Operations Integration, I became one of the hospital's subject-matter experts in its RTLS technology. As one of the few individuals utilizing the technology, I began driving strategic projects with the system's capabilities. Since the time we worked together, I have continued to build my professional toolbox by completing advanced degrees in business administration and design strategy. My subsequent experiences with external consulting teams have seen a refinement of the approach that I bring to change initiatives.

**My Leadership**

Several leadership theories were considered for how I would frame my leadership for this undertaking. Goleman's (2000) approach to leadership provided an opportunity to not only adapt the approach to the situation but also to consider the organizational climate. When leadership is approached this way, the leader holds an array of approaches that allows them to adapt to the unique circumstances. The six styles identified by research include Coercive, Authoritative, Affiliative, Democratic, Pacesetting, and Coaching. While a circumstance that needs a restorative leader is suited for the Affiliative approach, another with a capable team demanding measurable results would be better served by Pacesetting. Within this framework, I could understand the best style for Stevens Medicine and my natural style through self-reflection.

A secondary consideration for how to define and assess my leadership was the Servant Leadership approach (Greenleaf, 1970). Prioritizing the needs of the followers, servant leaders embrace empathy building with them and facilitating their growth. While the theory resonates with how I prefer to take on leadership opportunities, I recognize that it inherently holds limitations to the leader dynamic and does not leave room for circumstances and climates in which those behaviors are not appropriate. Thus, the ability provided by Goleman (2000) to assess the organization and determine the leadership style provides more versatility.

Embracing the notion that leadership can take on different characteristics depending on the circumstances, I reflected upon previous roles to see where they have encouraged me to try several styles (Goleman, 2000). These experiences placed me within different contexts where the leader's objective and the best means to achieve that objective would often differ. My time spent volunteering with law enforcement and veterans' organizations often encouraged a Coercive style, built around compliance and appropriate when rapid behavioral changes are needed. In

each instance, I mentored youth in weeklong boot camps and intended to drive those rapid changes. As Jeter (2010) noted in an analysis of these environments, the shock-inducing environment is characterized by demanded obedience to the counselors' orders and the strict regimentation of participants' behavior. Such an approach did not resonate with me as the rigid direction of any growth that might occur was entirely the counselors' decision. Time spent with a university program for student leadership development saw me trying the Coaching style, which Goleman (2000) notes as appropriate when the leader strives to foster the strengths and performance of their followers to prepare followers for the future. My primary objective was to help the program facilitators become better at delivering the program content so that they might become better leaders. While there was the opportunity to work with each team member on their objectives, the emphasis on critiquing and improving performance did not sit well with me.

The most natural I have felt in a leadership position was when I was elected president of a university club. Joining the club in the founding cohort, we started as a chapter of a larger national organization. Thus, Espoused Values such as integrity and mutual accountability were already established and provided to us (Schein & Schein, 2017). Many members joined on the notion that we would live by these values and have them permeate the decisions taken by the club. Since its founding, the club saw the original president attempt an Authoritative style with those members. Goleman (2000) characterizes such an approach as inspiring followers to support the leader's compelling vision. However, the circumstances by which the club came about were not conducive to the Authoritarian style's application of a unified vision as he tried to utilize the surface-level Espoused Values to guide the organization without examining the supporting layers of the culture (Goleman, 2000; Schein & Schein, 2017). As noted in Schein and Schein's (2017) Three-Level Model for organizational culture, the Espoused Values are underlined by the

members' behaviors and the unspoken expectations. Facing these circumstances, he would resign amidst struggles to see the realization of his vision and interpretation of the values.

Within this context was the moment I was elected president and had to determine how to address the situation. Observing the disagreements around understanding our values, I took the opportunity to facilitate conversations around what they meant for each of us as individuals and then as a club. In doing so, I enabled an examination of the other layers of our culture. I provided a space to uncover some unspoken expectations, which led to a more unified vision for our future. With that vision supported by the whole, I engaged in conversation with the executive board. With many of the club participants holding titles in other clubs, I was inspired to take a different approach to lead leaders effectively. I approached it in a manner that allowed all their ideas to be expressed, leveraged their knowledge, and led to decisions about how to carry out the details. In effect, I utilized Goleman's (2000) Democratic style that leverages collaboration and participation to drive action and direction. Since applying the style, I sought other opportunities for which it was best suited but have often needed to exercise some of the other styles.

Identifying the Democratic leadership style as the most appropriate for this change effort took some examination of the organization's context. Stevens Medicine continues to function exceedingly effectively, thus the organization does not find itself in a time of crisis and there is room for this being an extended effort. WAS serves as a compelling vision for where the organization is going but lacks integral details and enthusiastic support behind the idea. Based upon my experience at the comparable institution and on a team that also sought to integrate the different efforts of the organization into a cohesive whole, I can effectively speak to a compelling vision of what that can look like and tie it to the motivations of the employees. While this leaves room for an Authoritarian style, Goleman (2000) notes such an approach does not

resonate with a team of experts and leaders presenting themselves as such could come off as out-of-touch. Alternatively, the Democratic style would allow me to better leverage that expertise to understand how best to execute WAS.

Houchens and colleagues (2021) examined the effects of applying different leadership theories within the healthcare setting and found that collaborative approaches saw positive results for the stakeholders involved. However, I must remain conscious of the common pitfalls of the approach in that it can result in the effort feeling directionless and leave space for indecision. Thus, the utilization of a Democratic style in this context will require a delicate balance to facilitate intentional, action-driven dialogue among the departments at Stevens Medicine while acknowledging the expertise of those leaders and providing the leeway for them to create the details of execution.

## Chapter 3: Environmental Scan

### Four-Frame Model

Before attempting to foster this change at Stevens Medicine, a greater understanding of the organization and its environment is necessary. Bolman and Deal's (2021) Four Frames Model provides a comprehensive lens through which to consider these factors. As a multi-disciplinary model, the Four Frames encourages the development of organizational perspectives informed by fields such as sociology, psychology, political science, and anthropology. The frames through which to examine an organization include Structural, Human Resource, Political, and Symbolic. Application of the multiple frames equips leaders to develop holistic change strategies tailored to the realities faced by the organization and its employees. Within the context of this initiative for Stevens Medicine, I determined that the insights provided by the Four-Frames Model would be suited to serve my purpose.

Another considered framework for conducting the environmental scan was the SWOT model. Understanding a circumstance as having external and internal influencing factors, the model provides the lenses of Strengths, Weaknesses, Opportunities, and Threats through which to examine the landscape (Namugenyi et al., 2019). Often utilized to understand the competitive industry and market opportunities, the framework can provide valuable insights into emerging trends and steps needed for an organization's future direction. However, the problem posed by Stevens Medicine stands almost entirely within internal organizational dynamics. Opportunities and Threats do not pose as much of an influence on the success or failure of WAS as they emphasize a competitive landscape. External considerations contribute towards shaping those factors but focusing on the internal realities within the context of Stevens Medicine will allow for more robust identification and examination of them. For the new department to be realized in a way that accounts for all of the different organizational perspectives, there will need to be an emphasis on the insights offered by the Four Frames Model (Bolman & Deal, 2021).

### Structural Frame

The Structural Frame views the organization through a more formal lens as it captures the structure, policies, and decision-making (Bolman & Deal, 2021). Stevens Medicine sees an organizational structure that can be characterized as a divisional bureaucracy (Robbins & Judge, 2019). The divisional structure takes shape in how the hospital is segmented into departments by medical specialty. Each department operates independently from the other, with individual budgets and staffing. This structural philosophy extends beyond healthcare providers and sees roles such as Operations Specialists housed both within the Department of Surgery and the Department of Emergency Medicine. Within those departments, a centralized mode of decision-making is utilized. Leaders traditionally make the calls, and the rest of the department carries

them out. Amid these structures, the departments at Stevens Medicine also share characteristics of bureaucracy. Like many other medical institutions, common rules and policies were developed to standardize healthcare delivery (Lega & De Pietro, 2005).

A driving force behind some of that standardization, laws and judicial courts play fundamental roles in healthcare in the United States. The Supreme Court's decision overturning Roe v. Wade saw a healthcare procedure that was considered a constitutional right change into one that is now being debated and determined by individual states (Coen-Sanchez et al., 2022). Legislation such as the Affordable Care Act (ACA) saw the government change how patients, healthcare institutions, and insurance companies engage with one another (Duggan et al., 2022). The change driven by the ACA had resounding effects across the system, such as hospitals in California seeing higher revenue generated and a decrease in the number of uninsured patients. Accordingly, the total number of federal, state, and local government decisions that impact healthcare is almost too numerous to count. For the purposes of Stevens Medicine and RTLS, I will focus on those centered around the flow of patients throughout the hospital and their protected privacy.

The flow of patients in a hospital sees legal impacts from both an accreditation and a reimbursement perspective. The Joint Commission (TJC) exists as a nonprofit that evaluates healthcare institutions through criteria for patient safety (Schulte, 2012). From a regional standpoint, the District of Columbia (DC) requires Stevens Medicine to comply with TJC standards to hold institutional licenses and operate (Public Health and Medicine, 2008). Simultaneously, the hospital also sees a federal requirement for accreditation from TJC, or a similar institution, in order to participate in Medicare and Medicaid and receive reimbursement from those programs for rendered medical services (U.S. Department of Health and Human

Services, 2020). With respect to expectations around patient flow standards, the TJC adopted several requirements that must be in place for a hospital to receive its stamp of approval (The Joint Commission, 2012). Amidst these expectations are a standard operating process for how patients move through the emergency department, the definition of excessive emergency department wait times, an expectation to create goals for the timeline of that flow, and an expectation to capture goal performance metrics.

Such expectations around emergency department care are not only set by TJC but also are targets of the Centers for Disease Control and Prevention as the agency strives towards better health across the United States (Centers for Disease Control and Prevention, 2022). The Social Determinants of Health (SDOH) are key areas identified as leading to inequitable health outcomes. They include factors such as access to healthy food, literacy skills, and healthcare access. Within the aim towards better healthcare access includes reducing emergency department wait times. Karve and colleagues (2011) examined wait times of stroke victims based on race and found a disparity between the amount of time waited by Black patients when compared to that of White patients. In a time-sensitive event such as a stroke, such disparities can escalate to differences in outcomes. Hansen (2022) and colleagues found that Black women visiting the emergency department for pregnancy concerns waited statistically significant longer times than White pregnant women. Some medical services delivered in emergency departments see inequitable delivery of care. Thus, the regulatory requirements surrounding the reduction of emergency room wait times have reverberating effects regarding matters such as social justice.

The final consideration, specific to RTLS in healthcare and accounting for structural factors, is privacy. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) is one of the most well-known pieces of legislation in regard to patient privacy. Amongst the

expectations set by HIPAA include that healthcare institutions and its employees will protect the confidentiality of protected health information (Health Insurance Portability and Accountability Act of 1996, 1996). This information classification includes a patient's medical condition, insurance information, and provided medical services. The RTLS vendor assures that their systems have been designed and installed to comply with HIPAA standards. However, the responsibility falls upon us at Stevens Medicine to ensure such compliance and put safeguards in place lest unethical actors use a patient's location to infer protected health information.

Other considerations come from the broader debate around the notion of privacy when it comes to ethics and the law. Research indicates potentially harmful effects around long-term monitoring of location data and the inferences that can be determined with it (Altman et al., 2018). Within its Declaration of Human Rights, the United Nations identifies the right to privacy and does not believe there should be any interference with this right (United Nations General Assembly, 1948). The malevolent application of tracking technologies has led to ongoing criticism around the new stalking capabilities readily available with technology (Faith, 2022). The release of another location tracking device, Apple AirTags, has seen cases of individuals using such capabilities to know the whereabouts of others without their consent or knowledge. States, such as Ohio and New Jersey, are attempting to update language around criminal activity to include non-consensual location tracking through technology (Prohibit Installing Tracking on Another's Property w/o Consent, 2022; Makes It Fourth Degree Crime to Engage in Certain Tracking and Location Activities, 2022). While the previous legal consideration is in regard to patient privacy, this concern for policy expectations encompasses everyone who will be asked to participate in the RTLS technology. This includes almost all members of the Stevens Medicine

staff. Thus, the Structural Frame leaves space to ponder where the organization's ethics should be considered to supplement the relevant laws (Bolman & Deal, 2021).

*Human Resource Frame*

The Human Resource frame examines the relationship between an organization and its employees with respect to the shared alignment of skillsets, motivations, and values (Bolman & Deal, 2021). Stevens Medicine requires a large pool of specialized medical skills. Of the 20,000 employees, healthcare providers comprise 1,600 of them. Each provider is legally required to be licensed to practice medicine in DC (Health Occupation Boards, 2022). The institution regularly attracts top provider talent nationwide because of its reputation. However, the incumbent providers at the top of their field, who often lead their respective departments, know that their status helps sustain the organization's reputation. The resulting effect is a power imbalance between the providers and the rest of the 18,400 employees. The remaining employees comprise the administrative and support staff of the hospital. As the region's largest employer, Stevens Medicine has an imbalance over those employees, even if they have transferable skills.

The determination of hiring needs for the RTLS department will take inspiration from the recommendations of the RTLS vendor. With numerous installations of the technology at healthcare institutions, the vendor developed a list of recommended roles to be assumed. These roles include ones such as System Administrators, Data Scientists, Data Analysts, and Project Administrators. Resources have already been approved by the CEO for the necessary considerations needed in staffing the department. I have the capacity for five full-time team members. Such employees technically fall within the power imbalance group as there is a considerable number of professionals with this skill set in the region. While attempting to avoid conditions that take advantage of this imbalance, my own hiring approach will ensure job

candidates are aware of the dynamic they are entering with healthcare. Further, I will find candidates that share the underlying intrinsic incentive held among most employees at Stevens Medicine.

Concerning staff motivations, an alignment exists between the organization and its providers. Although the ever-present business necessity of generating revenue remains, the hospital exists to deliver the best possible healthcare to its patients. Many providers entered the field of medicine for such a purpose and thus are readily motivated by the work they do every day. Along those lines, the alignment between the values of the organization and its employees is strong. The Espoused Values of Stevens Medicine include excellence, integrity, and service (Schein & Schein, 2017). Supporting these values is the Basic Underlying Assumption that, at the heart of all actions and decisions, everything is done in the patient's best interest. These levels of culture also interplay with much of the ethics inherent to the medical field.

### Political Frame

The Political Frame assesses Stevens Medicine through the lenses of ethics and power (Bolman & Deal, 2021). Ethics serve as a spanning influence across many aspects of the organization. Serving as an undercurrent for the layers of culture and how power dynamics play out, certain ethical expectations underlie both this institution and the healthcare field as a whole (Schein & Schein, 2017; Bolman & Deal, 2021). Humanism is a foundational ethical framework of Western medicine (Thibault, 2019). Rooted in the autonomy of human beings rather than a divine force, Humanism grounds itself in notions of placing human interests first and leveraging the capacities of humans. The practice of medicine sees philosophical origins in this framework. One such way it has taken shape is with the Hippocratic Oath.

Western Medicine has historically seen its purposes understood within the Hippocratic Oath (Askitopoulou & Vgontzas, 2017). While countries like the United States have written and adopted a code of ethics under a different name, many of the original Hippocratic Oath principles still guide providers' conduct. Shared expectations between these codes include Do No Harm, the equitable treatment of patients regardless of demographics and identity, and adherence to a scientific rationale. However, the Hippocratic Oath and its successors have seen critique from a social justice standpoint. In an examination of the pledges administered at 141 medical schools, the consideration of a patient's autonomy in their treatment was not included (Dickstein et al., 1991). The absence of pledging to value the patient's decisions draws out a potentially problematic power dynamic in the patient-provider relationship. Upon such an ethical foundation, then comes the larger organizational power dynamics.

When understanding power structures within the context of the guiding ethics for the organization, tensions begin to emerge based on the differing priorities of the coalitions (Bolman & Deal, 2021). While Humanism and the Hippocratic Oath guide most of those within the institution, the considerations of administering an organization begin to compete with them. Factors such as efficient patient flow help to produce more revenue for hospitals (Nguyen et al., 2022). Such a concept has driven bed management professionals' role in influencing care plan decisions. While often providers themselves, leadership faces considerations around the big-picture flow of patients, available beds, and department budgets. These circumstances have led to perceived divides between patient outcomes and revenue generation. These political divides then intersect and compete with power dynamics.

Stevens Medicine experiences varying degrees of hierarchies and power discrepancies. With respect to the providers, certain roles see a considerable imbalance compared to others.

Akin to the rest of the healthcare industry, the traditional power structure places physicians at the forefront and leaves the other roles feeling marginalized (Rogers et al., 2023). When taking a step back, these dynamics begin to give way to resource allocation and decision-making processes. The organization experiences varying degrees of formal and informal hierarchies (Magee & Galinsky, 2008). The centralized departments are constructed around formal hierarchies, wherein there are established chains of command and delineated job responsibilities. This sees an emphasis on revenue generation as decisions are driven from the top down. Resultantly, informal hierarchies develop within that formal structure. They often develop around the valued social dimension of proximity to decision-makers. Such a dynamic sees roles close to the leaders gain significant status in the organization because those individuals can help you gain an audience with the leadership.

The dynamic between departments would be characterized as an informal hierarchy as well. In theory, all the departments see a flat dynamic with equal value for each. However, status takes the forefront in these positionings. The departments at Stevens Medicine that hold greater sway are those that generate the most revenue and whose reputations contribute to the national ranking. As it stands, the Department of Surgery considerably outpaces the rest of the departments in these two dimensions.

### Symbolic Frame

The final frame, the Symbolic Frame, surveys the organization for the culture and its artifacts (Bolman & Deal, 2021). Integral to the modern healthcare space is the embrace of patient safety (Aouicha et al., 2022). A patient safety figure is calculated based on the frequency of errors and adverse events in each unit and department. Within Stevens Medicine, the figure itself has taken on a symbolic meaning for the staff. How a department's figures stand is

reflective of how valued they are. Similar to other healthcare institutions, this becomes problematic when combined with positional power imbalances (Levine et al., 2019). The hospital sees difficulty in error reporting when someone in a lower-status role tries to report someone of a higher status. Looking at the organization-wide influences on the Symbolic Frame, the ranking as a top hospital in the nation has taken on a mythical status. It serves as a point of pride that not only is the organization serving others by delivering healthcare, but Stevens Medicine also does so as one of the best in the country.

When looking for heroes, I do not have to look further than the recently appointed CEO of the hospital (Bolman & Deal, 2021). Stepping into this role after spending the last 20 years practicing medicine, she gained the respect of many of the providers at Stevens Medicine. With her knowledge of their work and her presence on the frontlines for so long, she is seen as a figure who will take the opportunity to drive a medically informed perspective for the big picture of the hospital. Under such a banner came RTLS. She declared to the institution that a new technology was coming that would help Stevens Medicine deliver even better care and outcomes for patients. The subsequent installation of RTLS then gained notoriety as it required hardware to be placed in every room and hallway of the campus. Thus, the CEO now has the attention of the entirety of Stevens Medicine as they are curious how her new technology will improve what the hospital already does so well.

**Frames Synthesis**

A multi-frame approach allows for a more comprehensive change strategy design (Bolman & Deal, 2021). In the environmental scan examining the Structural, Human Resource, Political, and Symbolic Frames, several recurring considerations arose around prioritizing the delivery of quality healthcare. Staff members are intrinsically motivated to deliver the best

quality healthcare. The delivery of such is then tied to quantifiable measures that they must account for, such as TJC's emphasis on efficient patient flow. Coupled with formal and informal power structures linked to how effectively a department manages those competing interests, motivating factors are driven around improving departmental and organizational measures.

When implemented effectively, RTLS has demonstrated improved healthcare quality, greater operational efficiencies, and positive impacts on patient satisfaction (Sooyoung Yoo et al., 2018). However, other institutional efforts have shown that healthcare staff attitudes around RTLS are often the most hesitant in the pre-implementation stage (Griffin et al., 2020). In addition to these factors, many system benefits are not as immediately apparent to physicians, who hold the most power in the organization. While the other providers and support staff may enthusiastically buy into the technology when equipment is more readily locatable and available, WAS must also remain cognizant of the power-holding stakeholder. The benefits to physicians may see a delay in appreciation, while they only see non-providers from WAS making recommendations about how the hospital should function. Such is a circumstance for which the strategy will have to account.

Further, the expectation of my role is to design how WAS incorporates into the existing organization in a cross-cutting manner. Such a change itself will only amplify the change that Stevens Medicine is being asked to adopt with RTLS. The new department itself goes against what the institution has known for over 100 years with its organizational structure and politics. Given the nature of this effort, I have to build in the expectations of not only how RTLS will affect the organization, but also design the change around the new department integration.

**Chapter 4: Fostering Change**

Seeking to comprehensively address this initiative will require an approach that leverages the dynamics of the organization and my leadership style. Seeking to do this, I have integrated several change frameworks emphasizing the organizational psychology behind the change. Given that I found the most appropriate leadership style to be Democratic, I looked to develop my change approach around a framework centered around participative engagement of employees, such as Lewin (Goleman, 2000; Lewin, 1947). The highest level of characterization for this strategy is with Burnes' (2004) understanding of the frameworks created by Lewin. Rather than disparate theories, the integration suggests that Field Theory, Group Dynamics, Action Research, and the Three-Step Change Model can be used sequentially to implement a change and foster the necessary considerations to make the initiative socially sustainable. Known as Lewin's Planned Approach to Change, this will serve as the primary approach to the change, while being complemented by another change framework and a learning theory.

Within this understanding of change, specifically the Three-Step Change Model, comes a theory of how to integrate Kotter's Eight Steps into the process (Cummings et al., 2015). Such nesting allows for the detailed steps of approaching the change outlined by Kotter to add greater depth to Lewin's Unfreeze, Change, and Freeze steps. The Unfreeze stage includes Establishing a Sense of Urgency, Creating a Guiding Coalition, and Creating a Vision. The Change stage then includes Communicating the Change, Empowering Others to Act, and Creating Short-Term Wins. Within the final stage, Freeze, comes Consolidating Gains and Creating More Change and Institutionalizing Change in the Culture. Concurrent with these activities will be an awareness of the shared learning environment fostered around the new technology.

With the robust involvement of departments via Lewin and Kotter's approach comes another opportunity to engage and empower staff in their roles and utilization of RTLS. Rather than silo the capabilities of what can be accomplished with the new technology insights, an environment will be fostered to enable a Community of Practice (CoP) around RTLS (Lave & Wenger, 1991). I will detail how the participative change-driven steps will create the conditions for this interest to emerge organically. To support the process along the way, my team and I will provide resources and opportunities for such a community to develop among fellow RTLS practitioners in the Domain of healthcare.

**Field Theory**

Complementary to the analysis using the Four Frame Model, Field Theory encourages an analysis of the organization as a whole and the influences within and upon it (Bolman & Deal, 2021; Lewin, 1947). These influences include employees' perception of the organization, themselves, and the social forces. While a general understanding has been established with the initial environmental scan, I want to co-build this understanding with the employees to better gain their perspectives. The change initiative will begin by building the Leadership Committee comprised of leaders from all the departments at Stevens Medicine. The Leadership Committee will be briefed on the RTLS technology and the coming RTLS department.

With the power that these leaders hold in the organization, they will need to be the first ones I get to buy into the vision of the change. Such a vision will show how the improvement opportunities align with the organizational motivations of delivering excellent healthcare. Given the big-picture considerations of these leaders, I will also emphasize the cost savings that can come with the technology, courtesy of more efficient processes and less waste. Recognizing the findings from the environmental scan, the two departmental leaders that I am most interested in

enlisting in this effort are the Department of Surgery and the Department of Emergency Medicine. Holding to the informal hierarchy, the Department of Surgery will hold the greatest influence on the Leadership Committee. With the patient-flow-specific opportunities that the RLTS department would offer the Department of Emergency Medicine, the shared values, regulatory requirements, and reimbursement benefits could incentivize rapid adoption.

With buy-in from departmental leadership, the application of Field Theory will begin by identifying the stakeholders on the frontlines of healthcare delivery. Such individuals may include nurses, physicians, facilities staff, and supply staff. With those groups identified, the WAS team will conduct exploratory interviews to better understand Lewin's forces of influence around how departments interact with each other. The WAS team will be transparent about the motivating factors behind these interviews being the new department and technology. However, we will emphasize an understanding will collaboratively be built around how these are best realized. The resulting qualitative data will be assessed and any interviewees who express an interest in the technology will be documented.

**Group Dynamics**

The next step in the change process will be that of Lewin's Group Dynamics (Burnes, 2004). Where the previous step in Field Theory uncovered stakeholders' subjective perceptions of the organization and its influences, this step will seek a more objective approach. Group Dynamics examines the realities of the social atmosphere, how they influence the employees and any attempts at change (Lewin, 1947). To achieve this understanding, the WAS team will go into the departmental units to gather observational data. The team will review the environmental scan report and Field Theory findings to gain an idea of what dynamics to look for in these observations. Overall, they will seek to better understand how frontline employees engage with

one another when it comes to matters such as cross-department efforts. Quantifiable data will also be captured to gather metrics on patient flow in the Department of Emergency Medicine and equipment management in the Department of Surgery. Transparency from WAS on the purposes will be emphasized and any technology-interested employees will be noted. The resulting data will then be evaluated and juxtaposed with the insights gained from Field Research.

**Action Research**

Integral to Lewin's Action Research is for the stakeholders to engage with and reflect on the team's findings from Field Theory and Action Research (Burnes, 2004b). The WAS team will facilitate sessions with interdepartmental groups to carry out this step. Where previously only departmental leadership had dialogue across perspectives and interests, these Action Research sessions will allow this to occur with frontline stakeholders. Isolated to their own unit's perspective and engaging in speculation about other units, this could be an opportunity to build institutional understanding and empathy. Ideally, these sessions see frontline stakeholders arrive at ideas around addressing the fragmented coordination of efforts between departments.

A further opportunity in these sessions lies in the stakeholders co-creating the RTLS department's function. While the purpose of the RTLS department is to cut across the divisional structure, the way that WAS best accomplishes that purpose remains to be determined. Embracing Lewin's (1945) participative approach to change, the WAS team will facilitate conversations with stakeholders to help define how the new department engages with the rest of the institution. The synthesized recommendations from these sessions will be brought before the Leadership Committee and incorporated into the design of WAS processes.

**3-Step Model**

      With departmental leadership and engaged stakeholder agreement on how the realization of the new department takes shape, the WAS team will attempt to move from organization-wide resistance to an embrace of the change. To do so, we will utilize Lewin's 3-Step Model as it is understood with Kotter's Eight Step Model (Cummings et al., 2015). Such an approach will overcome the resistance to the solution of a cross-cutting department and identify key opportunities for the department to garner enough momentum built around this effort to foster new resistance against regression.

*Unfreeze*

      To Unfreeze the hospital employees, the team must destabilize the status quo equilibrium for the organization (Lewin, 1947). Accomplishing this feat will require the team to change the minds of the 20,000 employees at Stevens Medicine. Key influencers have become invested in RTLS and WAS, but intentionality will be required to scale that into the entire institution. In this effort, we are guided by Kotter's (1995) steps of Establishing a Sense of Urgency, Creating a Guiding Coalition, and Creating a Vision.

      **Establishing a Sense of Urgency.** With the crisis of ineffective department coordination already identified, the action behind fostering urgency at Stevens Medicine will come from socializing this urgency (Kotter, 1995). For a comprehensive outreach, communication will not only go out from departmental leadership about WAS, but also be delivered by their fellow peers. To accomplish this step, the WAS team will call upon the engaged stakeholders for their help. These employees took part in conversations where the impact of lack of departmental coordination was established and put into their terms. They are the ones who can empathize with

the perspectives of the frontline while promoting the urgency of organization-wide missed opportunities.

**Creating a Guiding Coalition.** The Leadership Committee will be called upon as the guiding coalition behind this change effort, and I will encourage teamwork amongst them to further determine how it becomes realized (Kotter, 1995). Thus far the committee has become invested in the RTLS department and is aware of how stakeholders would like to see it designed. The ask from them now is to leverage their department-specific knowledge of organizational functioning to garner further support and more advocates for the change. As top members of their respective fields, they hold considerable sway with the frontline powerholders, physicians.

As noted, the system's benefits may not be immediately apparent to the physicians. Nevertheless, they will be asked to accept a tracking technology that may give the impression of an invasion of privacy. Ideally, the leaders will leverage their influence and build their departmental coalitions with physicians to drive the necessary steps for technology, providers wearing the RTLS receiver. As those leaders build buy-in from this group, the opportunity arises to transform the greatest resistance into the greatest driving force. As the most influential individuals on the frontlines connect RTLS to their motivating purpose of quality patient care, they can supplement the urgency the engaged stakeholders foster.

With the Leadership Committee building a coalition around the intermediary piece of provider-receiver acceptance, the need comes to drive a coalition for the cross-cutting intentions of WAS. The aim of these efforts will be the duplicative administrative roles in each department, such as the Operations Specialists. Embedded in the context of their department, employees can speak to unique, ongoing issues. The Leadership Committee can make initial introductions and express their support for WAS, and then the responsibility falls upon me to build enthusiasm and

win favor with this staff group. In doing so, I can speak to the augmentation of their roles with greater departmental data and the opportunities in organization-wide data. I can also create a dialogue around their recommendations for how WAS carries out the cross-cutting operations, which enables them to become co-creators in this new concept.

**Creating a Vision.** Throughout the steps taken so far, the vague idea of an RTLS department and technology has been refined to what it means specifically for Stevens Medicine. At this stage, the WAS team seeks an appealing, simple vision that will be broadcast from the top-down (Kotter, 1995). To accomplish this feat, the team will call upon both the Leadership Committee and the stakeholders again to specify what the opportunities of WAS and RTLS mean to them. At this point the stakeholders have communicated the urgency behind this change to the frontlines. It's reasonable to assume that they have received feedback and refined how they talk about the idea during this time. Meanwhile, the Leadership Committee has been thinking about the nuances behind a new department at Stevens Medicine. Synthesizing these perspectives will allow for a balanced vision that speaks to employees on every level and from every role.

*Change*

With the status quo equilibrium destabilized comes the opportunity to enact the change (Lewin, 1947). Rooted in the perspectives of their peers, the form of the change ideally resonates with the employees who will be asked to take part and motivates them towards action. In my effort to drive this, I will again leverage the relationships developed from our previous efforts. This stage will be accomplished using Kotter's (1995) steps of Communicating the Change, Empowering Others to Act, and Creating Short-Term Wins.

**Communicating the Change.** Kotter's (1995) next step will ask that the vision of the RTLS department be broadcast across the hospital through as many channels as possible. He

notes that such efforts can fail when executives do not know how to effectively communicate the approach. Further, a lack of credibility can also result in the change effort failing. However, this change strategy has already accounted for such factors. The entire institution is aware of RTLS from the installation process. Urgency exists around a lack of departmental coordination. Coalitions have been developed around the coming change. Now comes the opportunity for the Leadership Committee and the stakeholders to pioneer the vision they have co-created.

      **Empowering Others to Act.** Removing barriers to the RTLS department's success is the crux of this step (Kotter, 1995). Centered around the RTLS technology, the change initiative of the department can leverage the ability for intradepartmental usage as well. The intention would be for frontline employees to be trained to use the technology and have access to the data for their unit or department. Employees with such an interest were identified and documented during the previous steps. However, a few barriers remain to their adoption.

      First, the Human Resources (HR) department will lead the development of organizational policies for RTLS technology usage. I will provide HR with the legal considerations drawn forth in the Structural Frame around HIPPA and stalking risks (Bolman & Deal, 2021). My ethical concerns regarding patient autonomy and the right to privacy will also be brought to the department for their consideration of how to navigate such concerns. For example, the policy could be that patients and staff may opt out of the technology. Further, I will make myself available as a resource for any questions they may have during the process. HR will also assume responsibility for employee training on the resulting policies.

      With the policies established, the next step lies in training employees on how to use the technology. Through outsourcing the training to the RTLS vendor, Stevens Medicine can rapidly gain frontline employees who can use the system to locate equipment and begin to capture data

around the movement of patients, providers, and equipment within their locale. An emphasis will be placed on gaining such system users in the Departments of Surgery and the Department of Emergency Medicine. Meanwhile, I will work directly with the employees undergoing these trainings and position myself as a resource for their understanding and utilization of RTLS.

**Creating Short-Term Wins.** The groundwork for this step has been laid around creating visible improvements for the rest of the organization to see (Kotter, 1995). With the engagement and investment from the Department of Surgery and the Department of Emergency Medicine now comes an opportunity to leverage projects that resonate with the motivation of delivering quality care. The opportunities for system-driven improvements are vast, but certain ones can be realized faster than others.

In the Department of Emergency Medicine, we can realize our first quick win. WAS can leverage patient data to create automated tools for staff. Alerts can be created to notify staff when a patient has been waiting too long, thus providing an opportunity to keep them in better compliance with TJC standards around wait times (The Joint Commission, 2012). While not guaranteed, there also lies the potential to create a more equitable delivery of care in that the system will bring attention to any patients who have been determined to be waiting too long, regardless of race, ethnicity, or other demographic factors.

Within the Department of Surgery, the quick win will be a bit more nuanced. This department was identified as holding influence because of being one of the highest revenue-generators for the hospital. Utilization of the system will have to be considerate of the fact that tracking how long surgeries are taking might not resonate with the organizational motivations, contribute to physician disconnect, and may harm the perception of the system (Mechanic, 2003). Rather, an opportunity lies in addressing one of the original feedback items in missing or

unavailable equipment. Anecdotally, staff spoke about the time spent delaying surgery due to missing equipment. During our previous steps, we captured metrics around these claims. Thus, within the department, a win can be generated by the system helping to check the presence of the necessary equipment in an operating theatre. If there were documented instances of surgeries being delayed, then cost savings could be calculated.

*Freeze*

The final stage of this initiative attempts to make these changes permanent by restabilizing the equilibrium (Lewin, 1947). We are attempting to create an influencing force within Stevens Medicine that can resist regression and further unintentional change. While Lewin advocated for participative engagement throughout the entire model, the Freeze step was highlighted as the most important to incorporate it. This assertion was then demonstrated through later research in the change space (Oreg et al., 2011). In order to carry out Freeze, I will take inspiration from the final two steps in Kotter's (1995) Eight Steps.

**Consolidating Gains and Producing More Change.** The several components of this next change step include leveraging the momentum from previous steps to formalize expectations, investing in the human capital that will ensure further implementation, and fostering further projects around the change (Kotter, 1995). Formalizing expectations will take shape in establishing more sustainable cross-department collaboration. The committee of departmental leaders and the engaged stakeholder groups have enabled the change up until this point, but they were established as temporary initiatives. Through these engagements, the departments will have experienced more cross-collaboration than in previous times. Leveraging this experience, a greater understanding of how those departments want to continue cooperating will develop. I will seek to facilitate agreements on how such cooperation will best continue and

be fostered once these temporary initiatives dissolve. As with these previous efforts, I will place myself and WAS in a position to oversee the fulfillment of those agreements.

I will now begin the search and acquisition processes for the remainder of my full-time employee allowance at WAS. As previously referenced, the RTLS vendor outlined the roles needed to support the technology and the CEO imbued me with hiring authority. Those individuals will gradually begin the transition of assuming responsibilities previously taken on by myself. This will enable me to spend more time engaging with staff across Stevens Medicine and less time personally driving the projects. With the hiring of these employees will also come the increased capacity to build on our quick-win projects.

Continuing to leverage the relationships built in the Department of Emergency Medicine and the Department of Surgery, I will seek to expand the intradepartmental projects to interdepartmental levels. Within the Department of Emergency Medicine, we sought to address excessive patient wait times. With patient data movement already being gathered, the RTLS department can assess the patterns of those patients as they move throughout the institution. Understanding hospital-wide patient-flow data can then inform efficiency improvements. When a patient is admitted to the hospital from the emergency room, they need to arrive at the appropriate receiving unit. In linking those admit orders to the location and duration data, insights can be gained around inefficiencies in cross-departmental transfers. In the part of the hospital where space for patients is almost always an issue, more effectively transferring patients could help to remedy that situation (Lindner & Woitok, 2020). Such an effort can be quantified and communicated to the rest of Stevens Medicine about patient flow improvements.

Within the Department of Surgery, we began to address the risk of delaying operations due to missing equipment. Equipment location can then be used to develop insights into

equipment movement throughout the hospital. An organization-wide utilization can see us understand the equipment levels and network relationships of movement between units (Martinez et al., 2020). Resulting knowledge, such as which units are regularly over their equipment levels, can inform where to seek equipment for relocation. Using these insights, the department can utilize alerts and supply processes so that the responsibility of equipment checks in the operating theatre is removed from the Department of Surgery. These efforts will help to garner further wins and the first organization-wide demonstrations of the RTLS technology.

**Institutionalizing Change in the Culture.** Efforts to institutionalize the change are best made when drawing clear connections between the change and its wins (Kotter, 1995). A pitfall of this step comes when the organizational motivations and values aren't updated to accommodate the change. Throughout this effort, connections have been drawn to a primary source of motivation for all staff: delivering excellent healthcare. The wins we sought connected to that motivation in easily quantifiable measures. With the stage set for this final step, the intention is to return to the Symbolic Frame of Stevens Medicine. Specifically, we will seek to create new heroes around our improvements to patient flow and equipment availability.

With our first adopters in the Department of Surgery and the Department of Emergency Medicine come opportunities for the heroes to be relatable and accessible to other employees. When those employees tell the story of the change, I will ask that the framing emphasizes a slight change in the typical organizational narrative. With the new RTLS technology and department, we deliver excellent healthcare through collaboration and data. When they share their stories across Stevens Medicine, a representative from WAS will be there to have follow-up conversations, build our network of connections, and improve awareness of the technology.

**Community of Practice**

Stevens Medicine has historically existed in a divisional structure and succeeded in this approach (Robbins & Judge, 2019). While the change initiative stands up a cross-cutting department, the driver for this change is the new RTLS technology. WAS uncovers and acts on the big-picture insights that the data informs. However, we are not the only users of the system. As previously mentioned, all employees will have the opportunity to learn how to use the available features, such as the real-time location of equipment, and gain access to the appropriate level data, unit or departmental. Stories will be told and heroes will be created around frontline employees using those capabilities to drive their initiatives. Such an effort to democratize the technology helped to lay the groundwork for another facet to evolve.

The change initiative helped to create a group of RTLS practitioners across Stevens Medicine. In effect, we have given a common practice where previously one did not exist (Lave & Wenger, 1991). All interested employees will be able to learn about the new technology and try ways to improve their work. While has everyone already contributed to the delivery of healthcare, the vast range of specialties and roles for providers and support staff often leads to service fragmentation to the degree where it would not be considered a common practice (Abendshien, 2018). However, this technology leads to a shared context rooted in the location and duration of patients, providers, or equipment. The utilization of that data leaves a vast amount of interpretation and application to be discovered. Thus, RTLS fills the gap in Practice and healthcare delivery becomes a common Domain for all users (Lave & Wenger, 1991).

While many employees remain in their specialized functions, there could be a shared interest and enough understanding to empathize with that range of perspectives. For example, a physician may not know the specifics of facility staff turning over a patient room. However, it is

reasonable to assume they can appreciate facility staff using the RTLS technology to make those patient rooms available more quickly. They can also contribute their thoughts on how interpreting location and duration data can serve that purpose. The only remaining piece of a CoP forming is the assurance of a community.

In understanding the notion of Community, Wenger (1998) identifies Mutual Engagement as the defining component. While Practice and Domain have been readily determined thus far and with the aid of the RTLS department, Community will require an undertaking from the potential practitioners. To properly develop, the pieces of Mutual Engagement are produced organically rather than formally facilitated. Those pieces include matters such as fostering a space where inclusive engagement can occur, a range of perspectives for complementary contributions, and dynamics that allow for disagreement and debate.

When the Department of Emergency Medicine, the Department of Surgery, and WAS sought Kotter's (1995) step of Institutionalize the Change in Culture through the use of hero storytelling, we provided a scaffolding for a community to form. Gathering many potential practitioners into one place built the department's network and allowed those interested to become aware of each other and start a dialogue about their ideas and application. Resultantly, an RTLS CoP at Stevens Medicine is as primed for emergence as it could be. Wenger and colleagues (2002) note that organizations intentionally cultivating a CoP, while challenging, remains possible. Rather than directing the development, the role of WAS will acknowledge the supportive role to adopt and the decentralized locus of power that comes with this learning model. Should one develop, I would see WAS encourage it as much as possible as we source new ideas and applications from those frontline practitioners and offer to help them spread across the organization.

**Chapter 5: Evaluation**

**Benchmarking Success**

Utilization of Benchmarking allows for data to indicate the effects of a change (Kraft, 1997). When metrics are established around the change and captured pre-change and post-change, quantifiable measures can lead to objective, statistical conclusions around the impact. While several benchmarks will give insight into the initial impacts of WAS and RTLS, previous applications show that this is only the beginning. Comparable institutions leverage the technology to drive improvements around areas such as patient satisfaction and employee workflow (Sooyoung Yoo et al., 2018). Stevens Medicine and WAS hold the opportunity for numerous future applications and projects from the amount of data generated by RTLS. All such initiatives will continue to be data-driven in nature, allowing for future benchmarks.

*Employee Surveys*

The strategic deployment of employee surveys will inform the results of the integration WAS and our efforts. Capturing feedback from both those who have engaged with the department and those who have not, the aim will be to understand the impressions around the new undertaking at Stevens Medicine. Taking inspiration from survey best practices, the action-oriented framing of the questions will help to uncover how WAS needs to position itself for increased engagement from the rest of the departments (Johnson, 2018). This benchmarking effort will be an Internal Benchmark as the results will only be captured within the organization and compared to any previously captured employee feedback on change (Kraft, 1997).

*User Adoption*

While not responsible for training employees to become users of the RTLS technology, WAS serves as the system's owner. The department can better carry out its cross-cutting purpose

when employees are engaged and knowledgeable about the system. Furthermore, those employees who go on to leverage RTLS can serve as a source for project ideas. The total count at Stevens Medicine is 20,000 employees. Whether motivated by the opportunity to improve healthcare delivery or to stop wasting time looking for equipment, employees may be driven by different motivators to adopt the system. However, while the trainings will be mandated, the utilizing technology is voluntary. Falling within the Competitive Benchmark category since the figures can be gauged against other organizations, user adoption rates at Stevens Medicine can be compared to those at other comparable healthcare institutions (Kraft, 1997).

### *Reduced Wait Times*

One of the initial wins of WAS and the RTLS was centered around reducing wait times in the Department of Emergency Medicine. We can analyze the initiative's impact statistically with historical data on this matter. Any resulting reductions can be linked back to how it better aligns Stevens Medicine with TJC expectations and the motivation of better care delivery. Should any reimbursement issues around compliance have resulted in penalties in the past, these resulting improvements can be quantified in monetary terms. All other things being equal, the change in wait times will be driven solely by WAS and its cross-departmental efforts. While this measure may begin as an Internal Benchmark to capture the degree of change, emergency room wait times stands as an important metric for all of healthcare (Kraft, 1997). Thus, the metric will become a Competitive Benchmark with considerable accuracy from the RTLS data.

### *Equipment Levels*

The other initial win for the department and technology was monitoring equipment levels in the Department of Surgery, which evolved into an institution-wide equipment management system. With each unit defining the required amount of equipment, WAS could gather

longitudinal data on the unit equipment levels. RTLS can inform the team how often they match these equipment levels. With this baseline of unit levels before implementing management processes, WAS can then capture the frequency after implementation. Like the Department of Emergency Medicine's wait time reduction, the change in equipment levels will be driven solely by WAS and its cross-departmental efforts. This measure will also begin as an Internal Benchmark with the potential to join the wider healthcare equipment management literature as a Competitive Benchmark (Kraft, 1997).

**Chapter 6: Conclusion**

The change initiative of incorporating the RTLS department into Stevens Medicine sees the Structural, Human Resource, Political, and Symbolic environments leveraged in a Democratic leadership manner (Bolman & Deal, 2021; Goleman, 2000). With Lewin's Change Approach being inherently democratic, the model's stages guide the big picture of the change strategy. At the same time, Kotter's (1995) Eight Steps provide prescriptive actions at certain moments of those stages (Lewin, 1945). The change strategy's participative and engaging nature helps to set the stage for a CoP to organically form and augment the work of WAS (Wenger, 1998). Benchmarks for success will be initially documented with employee surveys, user adoption, reduced wait times, and departmental equipment levels (Kraft, 1997). However, the robust amount of data capture and future projects provide opportunities for metrics-driven organizational wins that continually demonstrate the success of the department and the RTLS technology. Overall, this change strategy allows for an intentional, comprehensive redefinition of how Stevens Medicine delivers excellent healthcare through the utilization of robust data and facilitated coordination between departments.

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**Appendix - Supplemental Materials**

**Course List Worksheet**

| Course List Worksheet | |
|---|---|
| EDD 700 Leadership Theory and Practice | |
| Theories Used: | Goleman Leadership Style |
| Section(s) of the Paper: | Chapter 2 |
| EDD 724 Ethical Leadership, Equity, Cultural Proficiency, and Social Justice | |
| Theories Used: | Social Determinants of Health; Humanism; Patient Autonomy; Right to Privacy |
| Section(s) of the Paper: | Chapter 3 |
| EDD 755 Virtual Learning and Collaboration | |
| Theories Used: | Community of Practice |
| Section(s) of the Paper: | Chapter 4 |
| EDD 759 Law and Dispute Resolution | |
| Theories Used: | Health Insurance Portability and Accountability Act of 1996; The Joint Commission and associated legislation |
| Section(s) of the Paper: | Chapter 3 |
| EDD 763 Learning Design, Cognition, and Evaluation | |
| Theories Used: | Benchmarking |
| Section(s) of the Paper: | Chapter 5 |
| EDD 765 Organizational Change, Innovation, and Creativity | |
| Theories Used: | Lewin's Change Approach; Kotter's Eight Steps |
| Section(s) of the Paper: | Chapter 4 |

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Summary

**List of Doctoral Courses**

| Course | Description | Instructor | Term |
|---|---|---|---|
| EDD 700 | Leadership Theory and Practice | Stephen Kirnon, EdD | Fall 2021 |
| EDD 755 | Virtual Learning and Collaboration | Reyna García Ramos, PhD | Fall 2021 |
| EDD 759 | Law and Dispute Resolution | Gregory McNair JD, MBA | Fall 2021 |
| EDD 724 | Ethics Leadership, Equity, Cultural Proficiency, and Social Justice | Farzin Madjidi, EdD | Spring 2022 |
| EDD 765 | Leading Strategic Change | Laura Hyatt, EdD | Spring 2022 |
| EDD 767 | Qualitative Research Design and Analysis | Kay Davis, EdD | Spring 2022 |
| EDD 754A | Global Economics and Policy | Sean Jasso, PhD | Summer 2022 |
| EDD 754B | Global Policy Experience | Sean Jasso, PhD | Summer 2022 |
| EDD 766 | Quantitative Research Methods and Descriptive Statistics | Kay Davis, EdD | Summer 2022 |
| EDD 714 | Organizational Behavior, Theory, and Design | Latrissa Lee Neiworth. EdD | Fall 2022 |
| EDD 734 | Inferential Statistics | Abraham Song, PhD | Fall 2022 |
| EDD 763 | Learning Design, Cognition, and Evaluation | Paul Sparks, PhD | Fall 2022 |
| EDD 757 | Entrepreneurship | Zarik Boghossian, EdD | Spring 2023 |
| EDD 764A | Consultancy Project | Andrew Harvey, EdD | Spring 2023 |
| EDD 787 | Comprehensive Examination Seminar | Gabriella Miramontes, EdD | Spring 2023 |