Applying Kotter's Model of Change to Advance Clinician Acceptance of Clinical Changes

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NURS 703B: DNP Project

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March 01, 2022

Introduction

Problem Description

Change does not always result in improvement, but all improvement requires change (Institute for Healthcare Improvement, 2022). Resistance to change is one of the primary reasons that changes fail in an organization (Bareil, 2013). According to a systematic review of adopting a change in a medical setting, resistance to change was a main barrier in adopting the change (Scott Kruse et al., 2016). The two common reasons for failure of improvement initiatives are a) the struggles of leaders in healthcare worldwide to adapt to change and b) motivations of leaders to foster change and improvement (Institute for Healthcare Improvement, 2021). Motivation is the inspiration that moves beyond financial incentive to having the inclination to pursue goals through passion and persistence (Goleman, 2004). Other reasons for resistance to change are that changes disturb the status quo by implementing new evidence applicable to the work context (Gupta et al., 2017).

Rapid changes occur in health care organizations and to deal with this, change managers need advantage to help employees with the transition to doing things the new way (Campbell, 2020). During organizational changes, leaders must understand the psychology of change and deal with resistant feelings from employees. These feelings include complacency, anger, pride, pessimism, arrogance, cynicism, panic, exhaustion, insecurity, and anxiety (Kotter & Cohen, 2002). A Swedish study on the implementation of change found that most of the change responses were either feeling indifferent or passive resistance to change (Nilsen et al., 2019).

At a private outpatient mental health clinic in California (CAC) only six out of 43 providers that provide mental health care volunteered to join a newly established innovations committee. The project described in this paper will focus on the providers' perceptions of implementing Kotter's Model of Change in introducing a system wide change in the clinic.

Available Knowledge

According to Everett Rogers' Diffusion of Innovation Theory, there are five established adopter categories: Innovators, early adopters, and early majority (50% of people who are willing to adopt innovation), those who are skeptical of change (34%), and those who are bound by tradition and very skeptical of change (16%) (LaMorte, 2019). This theory is important when considering clinical change because it explains that change is readily accepted by half of an organization while the other half can be more resistant to change. A change model is essential to help integrate the hesitant half of an organization in implementing change.

To effectively implement a change, a leader must know how to reach staff attention, motivation, and interest. Kotter's Model of Change, developed in 1995, continues to be used in organizations as an effective model to implement change in organizations (Armstrong, 2021). The model consists of eight stages which are a) create a sense of urgency, b) build a guiding coalition, c) form a strategic vision, d) enlist a volunteer army, e) enable action by removing barriers, f) generate short-term wins, g) sustain acceleration, and h) institute change (Appelbaum, 2012).

There are many examples of clinical changes that used Kotter's Model of Change as a framework. A study implemented team huddles in small rural hospitals used Kotter's Model of

Change used the model and found that skipping steps or poor application of earlier steps increased failure of application of later steps and implementation (Baloh et al., 2017). This study implied that Kotter's Model of Change can be a useful guide to implement changes, although it needs to be applied as described by Kotter. Kotter's Model of Change has also been used to implement a heart-failure management system in four skilled nursing facilities with variable results (Dolansky et al, 2013). The staff's adherence to the heart-failure program varied ranging from 17% to 82%, as skipping steps and poor application of Kotter's Model of Change decreased effectiveness in change in the skilled nursing facilities. A quality improvement campaign in a neonatal intensive care unit that also used Kotter's Model of Change resulted in key improvements in neonatal care processes and outcomes (Ellsbury et al., 2016). Using Kotter's Model of Change proved effective as there were improvement in medication use, feeding, ventilator use, and negative outcomes such as death, bacteremia after 3 days of life, and catheter-associated infection decreased. An implementation of a practice to decrease falls in an internal medicine clinic used Kotter's Model of Change (Casey et al., 2017). The application of Kotter's Model of Change was deemed a success as screening for falls using the algorithm increased from 30% to 50% during the study period. The study gained leadership support and broadened the implementation of the algorithm in the organization because of the systematic implementation of Kotter's Model of Change. A qualitative study by Burden (2016) applied Kotter's Model of Change with the objective to decrease the rate of breast surgical site infection. After the implementation of Kotter's Model of Change, the overall surgical site infection rate not only decreased from 7% to 2%, but also the readmission rates dropped from 2.2% to 0%. A medical-surgical intensive care unit used Kotter's Model of Change to improve

communication and implement complementary quality initiatives (Mork et al., 2018). Results showed an improvement in communication and active partnership between patient and family members. This supported a strong patient and family centered culture in the unit. Overall, there is strong, evidence-based support for the use of Kotter's Model of Change in successfully implementing clinical changes.

Rationale

CAC does not have a standardized model for implementing changes in their organization. Kotter's Model emphasizes the necessity to have a structured approach in implementing change in an organization (Kotter, 2020). According to Kotter, the eight steps which are a) create a sense of urgency, b) build a guiding coalition, c) form a strategic vision, d) enlist a volunteer army, e) enable action by removing barriers, f) generate short-term wins, g) sustain acceleration, and h) institute change, are to be followed in sequence to provide its benefit in implementing change (Kotter, 2020). This model also recognized the importance of opinions from staff and other stakeholders for an implementation to be successful (Small et al., 2016). An organization consists of employees from different levels with their set of skills, relationships, reliability, and influential capability. Following the steps will encourage dynamic interaction among staff and promote personal growth and group innovation (Kotter, 2012). Because Kotter's Model has demonstrated success in multiple other studies related to change in clinical settings, we believe this model will lead to success in our clinical setting.

Specific Aims

The aim of this project was for the CAC private outpatient psychiatric clinic to apply Kotter's Model of Change in implementing clinic-wide changes. By establishing a method for introducing clinical changes, we hoped to increase adherence of providers to changes, provide smoother transition, and increase staff buy-in to clinic changes. By December 2021, CAC providers will have experienced Kotter's Model of Change and 20% will support the continued use of Kotter's Model in implementing an organization wide change in the clinic.

Methods

Context

CAC accepts privately insured and out-of-network patients. It provides psychiatric care to both children and adults. The clinic sees clients on weekdays and does not provide urgent or emergency psychiatric care. This clinic employs administrative staff and 43 providers, which include 32 psychologists, two master's prepared nurse practitioners, eight doctor of medicine trained psychiatrists, and one doctor of osteopathy trained psychiatrist. At present, the clinic continues to only see patients via telemedicine due to the coronavirus pandemic.

During past changes to clinical care, the clinic staff encountered difficulties related to not following a framework or model for change. Changes were implemented without consulting the opinions of providers. Changes were announced via email or during online meetings and implemented immediately. These difficulties included resistance, disappointment, and frustration from the change, feelings of inadequacy, decreased efficiency, insufficient training time and notification of change and overall disorganized implementation of new practices.

Interventions(s)

Kotter's Model of Change was used to implement an organization wide change in the clinic practice. The change model was introduced during a meeting with the innovations committee via a PowerPoint presentation. The members of the innovations committee provided feedback that it would be useful to follow a change model rather than employing change without structure. The owner of the clinic approved the change model after experiencing a somewhat negative transition to a new electronic health record system without using a change model. The medical director approved applying the concepts of Kotter's Model of Change in implementing organization wide changes in the clinic. The six providers who make up the innovations committee included four psychologists, one psychiatrist, and one nurse practitioner developed a change plan following Kotter's Model of Change.

To collect the necessary data, surveys were distributed to staff. Both a pre- and post-intervention surveys were used to asses change in staff attitude and perceptions. The surveys were developed by the lead innovators and faculty chair (see Appendix B). The surveys were handed out to staff at the beginning of planning the change and after the implementation of the change. The survey measures included questions configured on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) regarding the overall satisfaction of the staff in using the Kotter's Model of Change. A table was generated that lists how the innovations committee executed each step (see Appendix A).

Study of the Intervention/Measures

The primary outcome measure for this quality improvement project was the percent of staff who were satisfied with the new change process using Kotter's Model of Change**.** The

process measures of this project included number of staff introduced to Kotter's Model of Change, number of staff who indicated they were aware of Kotter's Model of Change after the intervention, and provider experience of using Kotter's Model of Change for clinical change. Balancing measures included staff burden and dissatisfaction that may result due to failed application of Kotter's Model of Change. We would know our intervention was a success if at least 20% of providers supported Kotter's Model of Change and accepted the change.

Analysis

This quality improvement project was implemented over 4 months from September 2021 to December 2021. Data from a pre-implementation survey and a post-implementation survey were analyzed. Data analyzed included the pre and post implementation survey answers of providers regarding resistance and acceptance of change, experience of Kotter's Model of Change, and whether providers were satisfied with the new process. Free text answers written in the space for comments and suggestions were used to determine whether the change introduced a positive or negative environment during the process of change. The survey was developed by the lead innovators and faculty chair. The providers' age, gender, race, ethnicity, and profession were not included in the survey.

Ethical Considerations

All the providers at CAC were informed of using Kotter's Model for implementing the change. The staff were notified that participating in answering the pre- and post-surveys was voluntary. All providers regardless of race, job title, seniority, age, gender, or sexual orientation were welcomed to participate in this quality improvement project and were not coerced to

partake. Staff who partook in answering the surveys were not required to provide their name. CAC, the participating clinic, signed a letter of support and allowed this quality improvement to take place. This project was submitted to the Oregon Health & Science University Institutional Review Board and was determined not to be research but a quality improvement project (IRB #STUDY00023165).

Results

CAC executed the Kotter's Model of Change in implementing change in the practice. Table 1 (Appendix A) outlines how each step of the model was implemented. Four out of the six members of the innovations committee did not continue participating in the planning stages of the model, for a variety of personal reasons.

All providers were given a pre-implementation and post-implementation survey to rate their experience of change implementation before and after using Kotter's Model (see Appendix B). Seventy-one percent of providers responded to the pre-implementation survey. For the first question, "I am resistant to a change at my workplace," 17.5% responded strongly disagree, 45% responded disagree, 27.5% were neutral, 7.5% agreed and 2.5% strongly agreed. This meant that 62.5% of providers were open to change, 27.5% were neutral, and 10% were resistant to change.

For the question "I am satisfied with the current process of change implementation at my workplace," 10% responded dissatisfied, 15% responded somewhat dissatisfied, 45% were neutral, 15% responded somewhat satisfied, and 15% responded very satisfied. This meant that

25% were not satisfied, 45% were neutral, and 30% were satisfied with how change implementation took place at CAC.

For the post-implementation survey, none responded strongly disagree or disagree regarding being satisfied with the new process, 37.5% responded neutral, and 50% agreed and 12.5% strongly agreed that they were satisfied with the new process of change, Kotter's Model of Change. In total, 62.5% of the providers supported continued use of the new process for developing clinical changes and the project was deemed successful.

Unexpected benefits of using the model included improved camaraderie among providers, increased collaboration, and interest of providers in participating in improvement projects and increased satisfaction with work environment. Regarding the balancing measures analyzed from the qualitative responses of clinician surveys, unexpected consequences included increased stress levels, and anxiety, and increased workload among innovation committee members who participated in implementing change. There was no increased work burden in providers who were not part of the innovation committee, however there was an increased in workload to the chief experience officer who helped distribute the surveys and gather the results of the surveys.

Discussion

Summary

In the past, CAC has not adopted a specific change model in introducing change in the clinic's practice. Since the adoption of Kotter's Model, 71% of the providers responded to the post-intervention survey, and 62.5% responded that Kotter's Model was helpful in

implementing change. The average response to satisfaction of using Kotter's Model was satisfactory. Sixty-two and a half percent of the providers supported continued use of Kotter' Model in implementing clinical changes and the intervention is deemed successful.

Interpretation

The percentage of support for use of Kotter's Model from providers was 62.5%, and this represented a positive response from clinicians as change implementation was deemed to be more organized than prior implementation processes. This also provided an opportunity for improving the adoption of Kotter's Model of Change as there was continued buy-in from staff. We also noticed increased provider attendance at scheduled non-mandatory meetings regarding clinical and practice changes.

As stated earlier, Everett Roger's Theory of Innovation Theory proposed that 50% of an organization are open to change and the other 50% are skeptical of change. Considering the result of this quality improvement project, the theory likely suggested that out of the 62.5% that supported the change, the 12.5% were probably the providers who came in with some resistance but were convinced of the change. The 37.5% of providers who responded neutral were likely the rest of the skeptical inviduals who would require further convincing in adopting Kotter's Model of Change for the future change implementation.

The outcome of this quality improvement project was considered successful, in alignment with the other studies discussed that followed the steps of the Kotter's Model of Change. Even though 50% of people in an organization are open to change, implementing change still needs to be strategic. The poor application of Kotter's Model of Change in a study

discussed earlier (Dolansky et al, 2013) showed that a change cannot be implemented successfully without having a systematic flow. Our approach of following Kotter's Model of Change in a step-by-step fashion contributed to our success.

The application of this project also came with the negative impact of increased workload. In future change implementation, the innovation committee should consider the workload of people involved in implementing change and the timeline for future clinical change.

Limitations

The implementation process of Kotter's Model of Change at CAC had several limitations. This project was implemented during the coronavirus pandemic. In-person meetings were not possible due to social distancing and meetings were done virtually via Zoom or Google Meet. This could have led to a decreased yield of staff involvement compared to in-person meetings as certain qualities of human connection cannot be virtually replicated.

Increased stress and feeling overwhelmed during the coronavirus pandemic can cause mental health concern and affect work (Center of Disease and Control, 2021). There was increase in provider burnout and isolation, decrease in attention, motivation and productivity as reported by providers during meetings. A work from home environment was stressful for some providers, and some providers also expressed parental burnout.

Additionally, CAC is a small private clinic, and the generalizability to bigger organization is limited. There are fewer staff involved and reaching out to fewer than 50 people is easier compared to an organization that has 100 or more employees. This was also an initial

implementation of a change model such as Kotter's Model of Change in CAC. Novice implementation may have played a role in the process of following the framework of the model and fine-tuning the implementation process.

Conclusions

We found that having a change model such as Kotter's Model of Change in implementing change was useful. This was the first change model that was adapted in CAC, and results implied increase in staff buy-in in clinical changes within CAC. While Kotter's Model of Change was useful in implementing an organizational-wide change, minor changes would not call for such model to be used.

Management should find ways to implement change in a more acceptable fashion to retain staff and improve service. The sustainability of using Kotter's Model of Change can be further tested by applying the model in the next organizational-wide change implementation. Also, as the coronavirus pandemic dissipates and social distancing eases, the application of Kotter's Model of Change may very well be easier as in person interactions are possible.

Appendix A

Table 1

Applying Kotter's Model of Change at CAC	
Steps	Execution of Steps
1.Create a Sense of Urgency	CAC dedicated a time on their monthly meeting and allowed providers to voice out concerns about patient care. Urgency to provide latest advancement in mental health care to improve quality of care were discussed.
2.Build a Guiding Coalition	CAC developed an innovation committee. The committee was given the privilege to form groups and focus on specific projects to enhance services to patients. The CEO and medical director were updated as projects were developed.
3.Form a Strategic Vision	As part of final DNP project, CAC developed a vision to provide the latest advancement in mental health care to improve patient outcome.
4.Enlist a Volunteer Army	Information was communicated and disseminated by the innovations committee regarding implementation of Kotter's Model of Change via email, Wednesday meetings, Friday meetings, and updating and utilizing e-workspace applications Notion and Teams to remind, inform and update clinical changes.
5.Enable Action by Removing Barriers	Barriers were identified (resistance/ more work mindset, telehealth communication only because of pandemic). Innovation committee members supported and empowered staff and used active listening skills in hearing concerns to development of new patient care service.
6.Generate Short-Term Wins	Small samples of patients were identified by providers for pilot testing of new patient care service. More engaged providers were rewarded and recognized.
7.Sustain Acceleration	Patient feedback was considered, and new service of patient care was offered to more patients. Celebratory emails were sent out for achievements and progress of work. Emails sent showed that credit and achievements were shared by everyone and produced exciting and positive energy regarding new patient care service.
8.Institute Change	Leaders communicated widely that the new patient care service is part of the new normal. An expectation that this new service is embraced and offered to patients who meet the criteria. Individual emails are sent out to providers that new patient care service is part of the new normal. Virtual orientation handbook was updated. CAC's website updated. New patient care service continues to be promoted and listed under services offered on CAC's website.

Appendix B

Pre-implementation survey

Name (Optional): _____

For each of the following items, please indicate your response. Thank you for participating in this survey!

	1 Strongly Disagree	*2 Disagree*	*3 Neutral*	*4 Agree*	*5 Strongly Agree*
1. I am resistant to a change at my workplace.					
2. I am aware of models and frameworks for implementing change in clinical settings.	*Yes*	*No*			
	1 Not satisfied	*2 Somewhat dissatisfied*	*3 Neutral*	*4 Somewhat Satisfied*	*5 Very Satisfied*
3. I am satisfied with the current process of change implementation at my workplace.					
Comments/Suggestions:					

Post-implementation survey

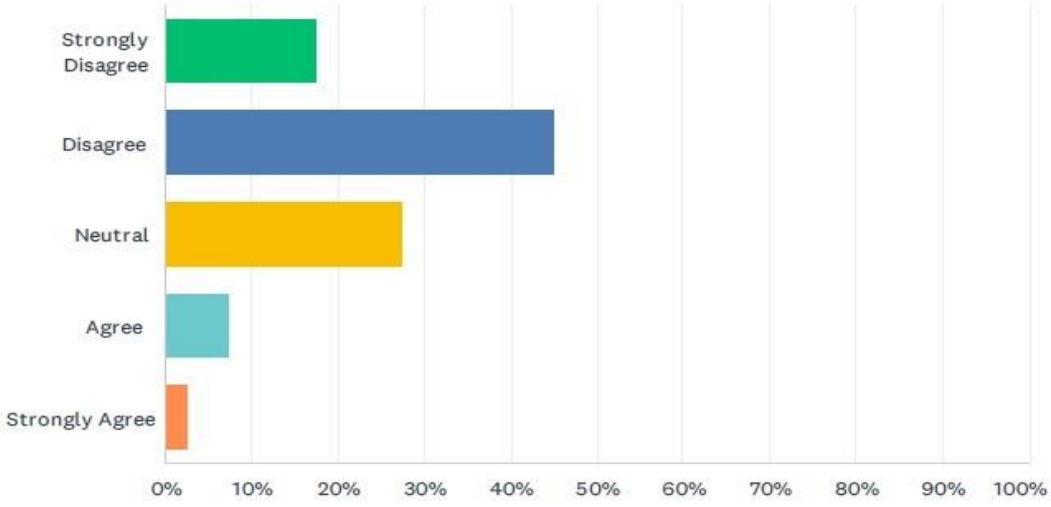
Name (Optional):_____

	1 *Strongly Disagree*	*2* *Disagree*	*3* *Neutral*	*4* *Agree*	*5* *Strongly Agree*
1. I am satisfied with the process of introducing measurement-based (MBC) platform					
2. Have you introduced the measurement-based (MBC) platform to a patient?	*YES*	*NO*			
Comments/Suggestions:					

Note: The process refers to Kotter's Model of Change. MBC was the change that was implemented using Kotter's Model of Change.

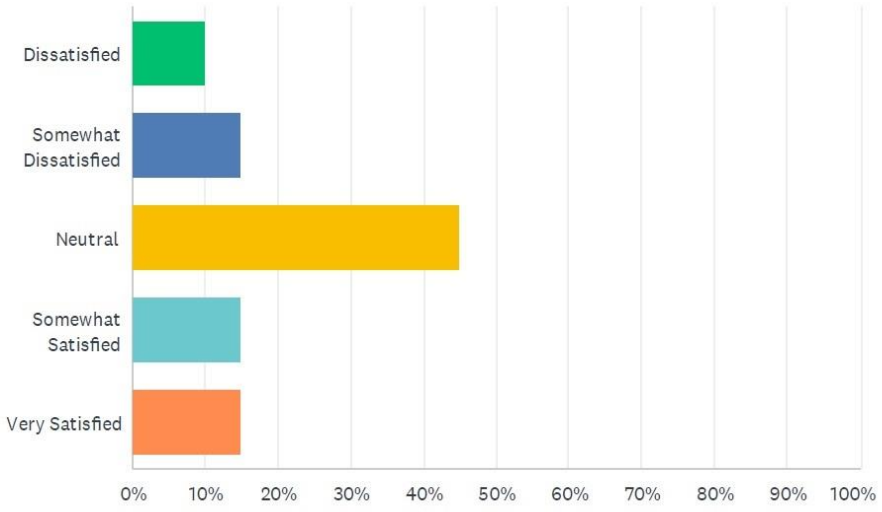
Change Implementation Survey

I am resistant to a change at my workplace.

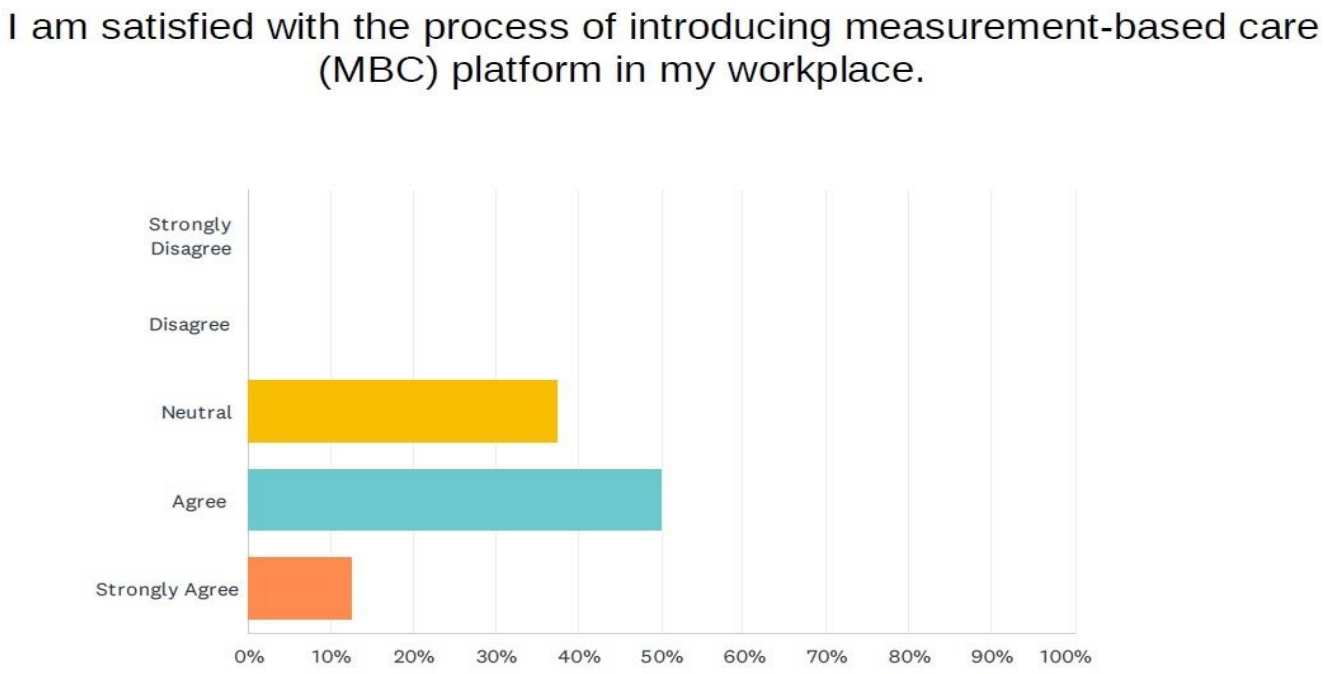


Change Implementation Survey

I am satisfied with the current process of change implementation at my workplace.



Post-MBC Introduction Survey



Note: The process refers to Kotter's Model of Change. MBC was the change that was implemented using Kotter's Model of Change.

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