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Strategic Risk Management within a Healthcare Context

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Abstract

Background: Strategic risk is the identification and management of factors that may threaten an organisation achieving its aims and objectives. Although an important aspect of all organisational development, strategic risk within the context of a healthcare organisation is unique. Our unit is an Upper Gastrointestinal Surgery department operating in the National Health Service (NHS) within the United Kingdom.

Main body: In this article, we explore the strategic risks associated with our institution. These strategic risks are those that particularly affect a healthcare setting. We explore the challenges involved in the identification and management of strategic risk, and explain how in some circumstances it can drive change and innovation. A theoretical analysis of strategic risk management is undertaken with examples of how this relates to a healthcare context. The strategies proposed and leadership skills required to successfully manage risks are discussed.

Conclusions: Strategic risk is an important aspect of management that requires particular leadership skills to formulate a framework designed to mitigate these risks and allow an organisation to achieve its potential.

Strategic Risk Within a Healthcare Context

Risk can be defined as the uncertainty on objectives [1]. Strategic risks are those that threaten the achievement of an objective by initial strategy selection, implementation and modification over time. Risk is an integral part of virtually all facets of life and the management of such risk has the potential to affect an individual or organization's ability to function and achieve its targets. It can lead to escalating costs, loss of market shares and reputational damage. However, it can also be a part of innovation with greater opportunities for development. Our unit is an Upper Gastrointestinal Surgery department operating in the National Health Service (NHS) within the United Kingdom. The risks taken in our operative practice are limited due to the detrimental effect on both individual surgeons and the NHS Trust should there be adverse event. Therefore, there must be a valid reason for deviation from Royal College and NICE guidelines to ensure both standardization and acceptable patient outcomes [2]. The field of surgery is open to novel technological advances to facilitate better patient outcomes and safety. These new products are often produced by large medical device companies backed by considerable marketing and specialist endorsement. Evaluation of the product and data from trials are usually formulated

prior to the products becoming available to be purchased from the procurement department. However, what is often not known are the long-term effects, if any, of the product. An example of this is a device introduced in the 1980s called the Angelchik. This was a metallic device positioned between the oesophagus and the stomach to improve reflux symptoms. Initial results were positive with an immediate resolution of symptoms for most patients. The subsequent 5-10 years revealed that a significant proportion of patients developed severe trouble swallowing or migration of the device into surrounding organs, necessitating its removal [3]. The NHS has finite resources and most trusts are in a variable degree of debt. Hospitals attain revenue for services provided from clinical commissioning groups and General Practioners (GP). Therefore, any change in strategy will bear a financial risk [4]. This is defined as the risk of an organisation failing to meet its duty to repay its debts. The uneven distribution of finances between departments risks variation in performance or services offered between specialties. Public perception, media coverage and political agendas would also have an impact upon the allocation of resources, and may not always be foreseeable. The PESTLE analysis can be used to evaluate the current and future strategic position and how these can be affected by external environmental factors [5]. The interplay between political, economic, social and technological factors have a major impact upon the ability of any organisation to achieve its aims. There are also some factors that are unique to the NHS and in such circumstances a SWOT analysis may more appropriate to highlight the strengths, weaknesses, opportunities and threats that are key internal factors in strategic risk [6]. Partnerships between hospitals and trusts exist due to centralization of key services and skills. This also incorporates a degree of strategic risk in that this relies upon the collaboration from other hospitals with their own strategic plans and service issues. The availability of both equipment and human resources are a fundamental factor in this dynamic. An example of this would be upper GI cancer operations being centralized to a one hospital in Kent. The large population in Kent often meant that there were no beds at this institution and therefore this had a significant impact upon the patient pathway at the original referring hospitals. Several years ago, the same tertiary referral hospital had a series of adverse incidents leading to the royal college of surgeons suspending their cancer service. This not only affects that specific hospital, but all the hospitals in that region as a consequential effect. The reliance on other providers is therefore a strategic risk. As in every institution, there is human workforce turnover. This can sometimes be predicted as in the case of retirement, which minimizes the impact upon an organisation due to the prepared provision of replacement personnel. However, it is sometimes unexpected which risks a void in the human resources required to fulfil the strategy intended. Taleb's black swan theory is a concept that describes events so unusual that they are inconceivable before they happen [7]. Disasters and public health risks represent a large scope of risk within the National Health Service. This has never been more apparent than in the last 18 months during the COVID-19 pandemic. The lack of warning, the novel disease pathology and lack of curative treatment meant that the health service was under intense strain as the infection count and mortalities rose. This also had a profound effect on the staff and redeployment was necessary. Several makeshift intensive care units were set up in wards and theatre recovery settings. Such disasters and tragedy could not have been predicted. It changed the organisational strategy instantly and dramatically. Resources and strategy were initially directed towards maintaining care for those critically ill during the pandemic followed by the introduction and maintenance of the vaccination programme. Taleb postulates that it is not feasible to predict such events but robust systems should be built to withstand such events and are controlled by people with the ability to react quickly [7]. The change in strategy not only affects the current recovery strategy; plans intended pre-pandemic

were often abolished or amended. There are current and emerging factors which influence risk. Evidence from research and trials guide new guidelines and protocols. These guidelines then have an influence on governance and policy development. Logistical changes to how healthcare was delivered during the pandemic to limit public exposure are likely to continue. Changes such as telephone outpatient clinic consultations have proved popular amongst both staff and patients in comparison to traditional face to face contact. However, this runs the risk of missed pathology as physical examinations are not possible and operation cancellations may become more prevalent due to inappropriate booking. The cessation of elective operating during the pandemic has resulted in a huge waiting list. Although the NHS values are not to make profit, it still is required to be financially sustainable. Therefore, it must compete with market forces of the private sector in offering services to GPs and commissioning groups. The new opportunities and challenges posed by the recovery process are both a source of innovation and improvement but still pose a strategic risk. The organisational context is also an important factor in risk. Schein's three levels of organisational culture help assimilate the role of values within the organisation [8]. The surface manifestations reflect the purpose of the hospital in providing excellent healthcare to patients rather than to follow a business model to generate profit. The espoused values include the governance processes and accountability to NHS England and government regulations. As a public sector organisation, the hospital values feedback from the public regarding performance and standards of care. The basic assumption is that patient care is the most important aspect of the organisation. In contrast to the private sector, the trust is accountable for all indemnity issues and legal compensation. The structure of the organisation is hierarchical but with significant autonomy at each level. The risks of this structure are that an individual may not feel supported and pursuing system changes are problematic as it often affects different departments and multidisciplinary team members. There are also external environment factors such as changes in what services the clinical commissioning group are willing to fund, resulting in an alteration of plans for service development. The Care Quality Commission (CQC) is responsible for evaluating whether the hospital is providing an adequate standard of care and addressing required areas of improvement. Their report will govern the immediate strategic goals and departmental policies.

Strategies for Managing Risks in a Healthcare Context

An awareness of effective risk management gives organisations a greater understanding of different risks posed and their potential impact. This facilitates better planning to foresee negative implications and greater organisational resilience. It has been shown that organisations that manage risks efficiently are more likely to achieve their objectives [9]. Various theoretical models can be applied to approaches designed to manage strategic risk. In the Ansoff modernist approach, a select group of senior managers take responsibility for the strategic planning over a defined timespan [10]. In the rare event of a change in circumstances, they react promptly to amend plans. In Peters and Waterman's post-modernist approach, emphasis is placed on innovation, new ideas and quicker reactions to events in comparison to competitors [11]. Middle management are supported by senior managers in making changes with flexibility and creativity. The more modern Hamel and Prahalad approach recognizes that plans need to be changed constantly [12]. Data and information are collected to help identify changes required. These changes are broken down into constituent parts with management supporting and monitoring staff during change implementation. Strategic risk assessments are designed to identify the strategic risks within an organisation and how they are currently managed and monitored [10]. It is a systematic

and continual process that is tailored to the organisation's specific needs and culture. There are seven basic steps, which begin with gaining a thorough understanding of the organization's strategy [10]. This step is critical as it allows the prioritization of the identified risks in line with key strategies and objectives. Information is then gathered through interviews, data analysis and the reporting of adverse events to identify strategic risks. A preliminary strategic risk profile is then devised and validated. Concurrent to the validation of the risk profile, an action plan is devised to mitigate the risks identified. The development of an organisation's risk culture involves a communication effort with two main objectives. The first is to communicate the strategic risk profile and action plan in a manner that allows prioritization and escalation. The second is to reinforce the concept that the responsibility of managing risk is a competency expected of all those in the organisation. Implementation of the action plan is the final step. The dynamic nature of risk means that these seven steps are in a continual loop within the organisation. When considering organisational vulnerabilities, it is important to be aware that the risks affecting an institution will depend on its size, the nature of its activities and the sector in which it operates [11]. Within the NHS there are both individual and systemic risks. The fundamental risk priority is the safety of patients and one method for managing this risk is through standardization. If patients are treated in the same manner across the country through the implementation of guidelines formed from a researched evidence base, variation is minimized. There are various theoretical models that can be applied to decision making. In my opinion, the NHS primarily uses the Townsend's rules of decision-making model with an emphasis on making decisions quickly. It is also interesting to note that in this model, a good manager only gets one third of decisions correct [12]. Due to the vast workforce and many different departments, models such as the Eisenhhower principle can help identify decisions that management should take and those that should be delegated. In our surgical department there are standard operating protocols so that all surgeons perform a particular operation in the same manner and using the same equipment. This standardization is designed to reduce human error and introduces an element of predictability for assisting staff and equipment provision. There are also policies in place to determine which health conditions the hospital has the resources to treat and which must be referred elsewhere. An example of this is patients less than 5 years of age requiring an operation. The hospital lacks the specialized equipment and has a staff skillset that is not accustomed to such patients and the familiarity in their post-operative care. These patients are therefore transferred to specialist paediatric centres, thereby mitigating this risk. Prior to any new intervention, service or equipment being introduced there is a risk assessment. This ensures that staff are adequately trained and potential risks are identified. The hospital also encourages reporting of adverse incidents through the completion of incident forms. Investigation of these adverse events leads to learning and improvement through the identification and resolution of system failures. The process is designed to manage and reduce the risk of the adverse event occurring again. External organisations such as the Clinical Quality Commission provide unbiased feedback into organisational risks and the effectiveness of actions put in place to address them. The use of an external organisation not only allows an independent body to provide an opinion, but also offers a degree of consistency and comparison with other hospitals that have been inspected. Hospitals are independent but accountable institutions. Nevertheless, the identification of risks and their management can be gleaned from other hospitals in the region and across the country. If there has been a serious consequence arising from a known or previously unknown risk, an investigation called a Root Cause Analysis in undertaken. The explores the sequence of events closely to identify the human and system failures that have led to the outcome. This process helps identify the underlying

aetiology for the incidents, which are usually multifactorial in origin. Changes can then be instigated to hopefully prevent a recurrence of the event. Although the NHS does not hold insurance policies in the same manner as the private sector, there are measures in place to mitigate against the financial risks caused by healthcare practice. The legal department have the authority to pursue claims against companies providing equipment in the event of malfunction. In addition, the risks of any operative intervention or procedure are clearly explained and documented in a formal consenting process. Interestingly many legal claims are often settled out of court as the financial cost to the hospital in defense of the claim often outweighs any potential settlement. Healthcare is one example of a messy wicked problem as defined by Rittel [6]. This is highlighted by the relationship between finite resources and the ethical responsibility to produce the best possible patient care. The lack of any creditable solution leads to the concept of "Wholesome design for wicked problems" in which interventions rather than solutions are required to continually reduce the impact of the problem rather than seek to eliminate it [7]. Strategies for managing risk should be an evolving process due to the ever changing environmental, economic and social landscape of society.

Leadership Skills for Strategic Risk Management

It is important that risk management is not seen as a sole responsibility of an individual or department, but as a culture of awareness throughout the organisation. A fundamental aspect in creating this culture is strong leadership and good communication skills. There are various risk competency frameworks that can be used to as models to identify essential skills and behaviours required for strategic risk management. The International Institute of Risk and Safety Management offers a framework which facilitates benchmarking for personal and operational capabilities [8]. The competencies and behaviours are accumulated as individual's progress in their careers. Each competency domain is linked to whether the individual is at the operational, managerial or strategic phase of their career. The framework highlights the specific level of skill and behaviour required at each stage but doesn't demonstrate how these are achieved; this makes the framework applicable across numerous industries and organisations. Most large organisations will also set out a code of practice to identify known risks to staff and the environment with contingency measures available for mitigation of the risk. Each NHS trust will produce several codes of practice encompassing several themes such as information security, clinical systems and confidentiality. Each code of practice will include elements of risk identification and management and provides a structure for leaders to follow. Overall codes of practice regarding risk management in the NHS are governed by NHS resolution. The attitude of individuals and organisations to risk judgement has a significant impact upon the delivering of solutions to reduce risk [9]. Leaders will have their own individual perception as to what form of action is required to counteract risk and when the threshold for needing to act has been reached. They will also be aware of when actions need supplementation or when the original proposition has been unsuccessful in achieving its purpose. Gentile (2012) introduced the concept of value-driven leadership. The theory postulates that leadership reaches its true potential once core values are embodied by the individual and embraced by the whole organisation [10]. This leads to sustainable change in culture. In the context of risk management, the organisation would have a greater awareness and appreciation of strategic risks if it was an important part of leadership values. This not only contributes to the personal development of individual leaders but also encourages employees to engage their values, sense of purpose and motivation to contribute positively to the organisation. To gain the trust of followers and flourish as a leader it is important to

act with integrity. Blanchard (2011) argues that a key part of integrity is consistency [11]. The set of values and systems followed does not alter in varied circumstances and leaders behave in the same manner that is expected of their followers. Believable leaders treat everyone fairly and with respect. Behaviours are held to a high standard and are not affected by outside influences. There has been a societal expectation that organisations have a conduct that is morally and ethically acceptable and these demands have been placed on organisational leaders [12]. This is particularly true of the healthcare industry in which morals and ethics are of the upmost importance. Ethical leadership does overlap both servant and authentic leadership skills. Entrepreneurial leadership is defined by Roebuck as the management of people to achieve the desired aim with the optimization of risk, innovation and personal responsibility [13]. This leadership style focuses on the effective management of risk rather than the minimization of risk. The approach requires contextual awareness and the ability to lead in dynamic environments through creativity and innovation. Authentic leadership involves the appreciation of follower input and ethics. Goffee and Jones argued that modern organisations lacked the human connection between people within the organisation and displayed a lack of self-awareness. In contrast, authentic leaders communicated well and were able to inspire followers through their ability to make people feel valued and appreciated [14]. In the NHS, there is a large degree of goodwill in people going above and beyond for patient care and the authentic leadership style can make staff feel appreciated and promote morale in difficult circumstances. Transformational leadership is a leadership style inspiring a positive change. Bass and Riggio propose that there are four main components of this approach [15]. Firstly, promoting intellectual stimulation by encouraging creativity. Secondly, having an individualized approach to support followers to foster better professional relationships and communication. Transformational leaders have a clear vision which is imparted to followers with the aim of adopting a similar enthusiasm into that vision. Lastly, they should act as a role model for followers and the organisation in general. In regard to risk management, this approach is likely to inspire followers to adopt risks and is open to the consequences of failure. However, it also encourages both leaders and followers to have the insight to change practice when the current approach isn't working. It accepts that risk taking is a core aspect of innovation. Stakeholder management is the process deployed by the organisation to manage stakeholder expectations and conflicts of interest. The appreciation of stakeholder management enables the prioritization of key relationships through the identification of stakeholder analysis. In healthcare stakeholders represent the public, clinical commissioning groups and board directors. Priorities for each group vary but an awareness of their expectations and subsequent strategic risks is an important part of future planning.

Risk Management Framework to Deliver Strategic Objectives

Identification of the Strategic Risk

- The huge waiting list for elective operations potentially resulting in patient harm as a consequence of the delay.

The pandemic has resulted in the temporary cessation of elective operating lists as theatre space and anaesthetic personnel were redeployed to makeshift intensive care units. The pandemic also resulted in a delay of diagnostic facilities. The only operations that were conducted over a 6-month period were cancer surgeries and emergency operations for patients presenting to the Emergency department. As a consequence, over 2000 patients remain

on the general surgery waiting list at the hospital. Elective surgery resumed a few weeks ago and patients having their operations had been waiting on average for 75 weeks.

Relationship to the Strategic Objectives

The Trust has several strategic objectives which are affected by this strategic risk;

- Getting to Good

This objective reflects the aim to improve quality of patient care, safety and experience resulting in outstanding care. The significant time delay for patients to undergo their operations reflects a compromise of all these aspects. Disease progression during this time interval leads to greater patient suffering and can make the actual operation more difficult thus increasing risk.

- Higher Standards for patients

The trust aims to treat patients in a timely way and allow access to the best care at all times. This strategic objective will therefore be compromised. Each week General Practitioners send in letters informing the hospital that their patients are becoming more symptomatic because their pathology is advancing whilst awaiting their operation. There is a governance element to risk and it is the duty of the hospital to ensure that those on the waiting list are not coming to any harm as a result of the delay. Incident forms are completed or all those waiting beyond 52 weeks in accordance with government legislation. Safety restrictions for both patients and staff mean that theatre turnover and efficiency is less than previously. Patients are separated into red and green pathways to minimize infection risk. Those on the green pathway have been vaccinated, had negative COVID tests 3 days before admission to hospital and have also been isolating for those 3 days. Those on the red pathways usually present as an emergency and have therefore not followed those protocols. The separation of patients and the 20 minutes' aerosol and cleaning time after each case means theatre capacity and turnover is reduced. As the quantity of operations has reduced, the demand has remained at consistent levels. Outpatient clinics are still running and remain an important source of revenue for the hospital. This generates more patients requiring elective operations and the waiting list increases each week as the number of those added to the list exceeds those being operated on. This raises the question of whether the threshold for offering operations needs to change. An example of this would be the orthopaedic surgeons agreeing a policy that they would not offer a joint replacement if the patient was over a certain weight. The clinical commissioning groups may also choose not to fund certain operations such as asymptomatic hernias. However, both approaches have a financial impact for the hospital. Decision making is affected by the foreseeable delay. It would have previously been common for patients to come in as an emergency, their symptoms settle, and get added to the elective waiting list for an operation in the future. In the current climate the threshold for operating on these patients during their index admission is much lower. It is imperative that as the morbidity risk to patients will be apparent for a considerable amount of time, there should be a strategy to monitor such risk. Clinical incident forms are used to report incidents or concerns and analyze the event. The forms are sent to the National Patient Safety Agency to explore and recommend any systemic changes. It is now a national requirement to complete a clinical incident form for any patient that has waited more than 52 weeks for their treatment. This ensures that the scale of the risk is monitored at both a local and national level. Data is accumulated between different surgical specialties within the same hospital to ascertain whether different departments can learn from each other in managing waiting lists and the subsequent risk. Data is also compared with other hospitals in the region and if there are noticeable discrepancies between waiting list times there would be co-operation between hospitals to reduce

potential harm and risk. The private sector has also been utilised as a potential avenue to outsource operations. This has a disadvantage in that the patients have to meet a new surgeon who may be less familiar with their care and also has a detrimental financial impact for the hospital. As there are a vast number of patients on the waiting list with a host of different pathologies and severity, there must be a strategy for prioritization. The Royal College of Surgeons has issued guidance for a framework to be constructed allowing the waiting list to be prioritized as per pathology. The principle is that the most serious conditions are treated first. However, although this framework has been universally adopted, it does not factor in the longevity of symptoms or the individual patient impact of the more common conditions. The criteria in which prioritization is based is a dynamic entity and will evolve as the risk changes. It may also change following evaluation of the current framework for managing the waiting list. Decision- making models are used as part of the risk management framework. Clinicians are torn between the ethical dilemma of wishing to provide treatment for their patients and being limited by the resources and environmental impact of the pandemic. A well-known method for making decisions on specific issues is the Rational Decision-Making model by Kepner and Tregoe **[16]**. This model has been shown to be an effective technique for determining a course of action and ensuring commitment to it. In my opinion this is the model that is most suited to this particular strategic risk and its management. This is because it is thorough and systematic as well as being transparent. It is based on effective information gathering and is less inclined to be influenced by emotional responses. The 8 step process in Rational Decision Making involves the identification of the issue, the identification of decision criteria, allocation of weights to the criteria, consideration of alternatives and implementation of the decision and subsequent evaluation **[17-27]**.

Conclusion

Although the implementation of all organisational objectives are subject to strategic risk management, institutions within the healthcare context must ensure that risks are balanced with patient safety and abides to the values consistent with public expectation. The identification of risks in the provision of healthcare leads to an ethical, financial and morale obligation to address such issues. However, within the context of finite resources this can be challenging. The article highlights some of the risks assessments in our institution and measures that have been implemented to mitigate these risks. Although risk management is not the sole responsibility of a particular individual, it does rely on a unique set of leaderships skills amongst leaders within an organisation at multiple levels. It is through this sense of communal responsibility that risks can be identified and resolved. We explore the challenges we have experienced in our risk management strategy and the framework devised to ensure that patients are not placed at significant risk. The approach to strategic risk management is a dynamic process that is constantly evolving and as such is constantly under review and reflection.

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