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Utilising Available Technology to Reduce Waste and Decrease Patient Experience Times

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Utilising Available Technology to Reduce Waste and Decrease Patient Experience Times

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I would like to thank the staff of both the Emergency and Patient Flow Departments for their invaluable support and contribution to this project. Most notably I would like to thank Helen and Jackie for their assistance and unwavering support to the project plan. Ms. Mary McCarthy and Mr. Steve Pitman and all the staff in the Institute of Leadership. To my wife Karen and son Aaron, for your patience and understanding I am as ever, yours.
Abstract

This Organisational Development Project focused on how admissions through a hospital’s Emergency Department are organized. The primary aim was to streamline the process of organising these admissions by reducing waste and utilising available technology to improve patient flow. Following the introduction of Governmental targets in Healthcare, individual healthcare institutions are seeking ways to achieve these targets. The current process in place has many steps with duplicate paper records of ward allocation for patients who require admission. The patients' final destination within the hospital was not recorded on the Emergency Departments' Patient Information Management system (Symphony). Through the process of Lean Management the process was mapped and non-value added steps were removed. Symphony was upgraded to allow the Bed Managers to electronically record the patient’s final destination. This in turn also removed further non value steps. This increased efficiency has allowed for a reduction in paper records, a reduced workload for staff and a reduction in the time patients spend in the Emergency Department. This project has improved an aspect of patient flow and will enhance the delivery of safe and effective healthcare.
CHAPTER ONE

1.1 INTRODUCTION

This organisational development project was undertaken in the Adult Emergency Department of a busy Dublin academic teaching hospital and the process was completed in conjunction with the HSE change model. The proposed project is centred around utilising the current Emergency Department Patient Management computer program (Symphony) to eradicate the need for hand written duplicate paperwork, thereby, reducing the number of steps in the process of organising emergency admissions, in an attempt to increase efficiency and reduce patient experience times in the Emergency Department.

In our ever evolving society, to maintain a status quo would be remiss without continuous evaluation. In the context of healthcare, the demand placed on it by society is constantly changing due to many factors including environmental and financial pressures. To support this, the Health Service has employed its own change model to back improvement initiatives. In 2008 the Health service Executive (HSE) put forward their model, with the aim of improving the experience for both service users and staff (HSE, 2008). When employing the use of a change model, it is with the aim of achieving an improvement to develop an organisation. This is described as;

“Organizational development is a systematic application and transfer of behavioural science knowledge to planned development, improvement, and reinforcement of the strategies, structures and processes that lead to organizational effectiveness” (Cummings & Worley, 2009:1).
1.2 ORGANISATIONAL CONTEXT

Emergency Departments are under continuous pressure in today’s health service. There are many factors which can influence these pressures. Most notably is the pressure to find an appropriate bed for a patient when a decision has been made to admit a person into hospital.

Surrounding this, there are many factors which can delay this process and indeed there are many delays in getting a patient to a bed once an appropriate bed has been identified. Within my organisation a process takes place to secure a patient a bed once a person is admitted by an in-house team. This process starts by the nurse recording the patient’s details on a hand written sheet, their diagnosis and the admitting Consultant. Following on from this, the nurse will then input the same/similar details into the Emergency Department (ED) patient management computer program named Symphony. The nurse will then notify a clerical officer who will transcribe these details onto their own hand written form. The clerical officer will then inform the bed manager who will also transcribe the details onto their particular form. When an appropriate bed is identified for a patient, the bed manager will record this on his/her form and notify the clerical officer in the ED who will also record this on their hand written form. When the nurse is informed, the ward will be recorded on the nurse’s hand written list. Symphony is not updated with this information as it is now recorded on a different patient management program which is used throughout the rest of the hospital (iPims).
This process has many steps which provides for accurate sharing of information, however, it is fragmented and has many areas of duplication. Symphony is not utilised to its potential and with the introduction of a new addition to the program (which can be achieved on a cost neutral basis) this information can be recorded and is then instantly available to all relevant staff. As it is an electronic record it eradicates the need for the numerous hand written sheets. When a bed is identified it is envisaged that this information will be uploaded to Symphony. This will reduce the time spent on telephone calls which can often be difficult at busy times. The streamlining of this process will then have the outcome of reduced reliance on paper records and improved quality of care for patients.

1.3 RATIONALE FOR SELECTING THE PROJECT

Working within the ED, it can be difficult when there is a need to interact with many people from different disciplines seeking similar information in relation to patients. This information is often stored on paper records at local level and is not available to other disciplines involved in the care of our patients. With the introduction of this project, it will ensure that this information is easily accessible and available to all concerned through our electronic records. With the reduction in unnecessary record keeping and more timely transfer of information, it will help reduce the patients experience time in the Emergency Department.

1.4 AIM & OBJECTIVES
AIM

To streamline the process of organising emergency admission into the hospital by reducing waste and utilising the use of available technology to improve patient flow.

OBJECTIVES

With the introduction on the National Clinical Care Programmes, there is increasing demand to meet national targets set out to enhance the experience of the service user within healthcare. The purpose of this project is to analyse current practices within a particular section of service delivery and improve processes, by reducing waste which will have a positive effective on the patients total time spent in the ED. This improvement will enhance the delivery of safe and effective healthcare. To help achieve the desired outcome of this project the following objectives have been identified.

- By the 16\textsuperscript{th} November 2015 the proposal will be presented to the Chief Operations officer to obtain approval and sponsorship.
- By the 30\textsuperscript{th} November 2015 a working group will be set up comprising of the relevant stakeholders to identify their level of support for the project and involvement at particular stages of the process.
- By the 4\textsuperscript{th} January 2016 the ICT Consultant will establish a timeframe for the software update.
- By the 11\textsuperscript{th} January 2016 the Bed Management Department will identify the number of staff who will require training in the new software.
• By the 18th January 2016 a process map will be compiled outlining the current process with the identification of non-value added steps to be removed to ensure waste reduction.

• By 29th February 2016 it is envisaged that training will begin for all staff in the new software with 100% of staff being trained within one month.

• By the 4th April 2016 a trail of the new process will be introduced for two weeks. The outcome will be measured through process mapping the new pathway which will provide a comparable time frame to the current process.

• By the 28th April 2016 it is envisaged that there will be 100% compliance with the new process with all patients having a destination record on Symphony.

• By 7th May 2016 a comparable data analysis will be performed to measure the reduction in patients experience times.

1.5 ROLE OF THE STUDENT IN THE PROCESS

As a Nurse Manager in the Emergency Department I have a responsibility to help ensure that we deliver the highest standard of care to our patients. It is my direct responsibility to identify patients that have been admitted by an in-house team and to initiate the process of securing an appropriate destination for the patient. The team members involved in this process are from various other departments' throughout the hospital, and therefore, may not be fully aware of the difficulties encountered in organising these admissions. It is therefore acknowledged that a nurse from the Emergency Department is best placed to achieve the best outcome with this project. I have the knowledge and contact with the appropriate people to gain support with this
project. I will act as the project lead and will ensure it meets the objectives as set out above.

1.6 SUMMARY

This introduction puts forward the proposed organisational development project by setting out the organisational context and rationale for choosing the project. The aim and objectives are identified, which provide a timeframe for the planning and implementation of the change to current practices. My role within the organisation is analysed for appropriateness as the lead stakeholder to bring about this change.

To continue chapter 2 of this paper will examine the literature which is relevant to the specific topics as outlined above. A detailed review of the search strategy I used will be outlined and from this I will put forward the recurring themes within the literature which I will critique to support this project.

Chapter 3 will focus on the organisational methodology and in particular the HSE change model which is used in this instance. The HSE change model will be analysed and its particular appropriateness for this project will be critiqued. This chapter will also provide reflection on the process of completing the project.

Evaluation is important and chapter 4 will look at its place in healthcare. This section will include the evaluation and methods employed within the project to support the rationale put forward. The results of the evaluation will be addressed in reference to the stated objectives and the outcome of the project.
Chapter 5 will look at the impact of the project with particular reference to those involved and those impacted by this change to our current practice. It will highlight strengths and limitations which have become evident and I will put forward recommendations for future organisational development projects to be undertaken. And finally to conclude I will provide a summary and conclusion to close this paper.
Chapter 2

2.1 INTRODUCTION

The purpose of a literature review is to examine all available information on a topic, to assist in the formation of one’s own opinion on a subject. This information can be obtained from a variety of sources including books, professional journals and the internet.

The purpose of this particular review is to examine the literature available in relation to the organizational development project being undertaken. The project has a broad base and as such, the following themes have been identified for examination:

- Paper versus electronic records
- Lean thinking in healthcare
- Managing patient flow.

Although these themes are all very different, it is necessary to look at each one individually to full appreciate the impact of this project.

In searching the literature, the writer identified articles and journals through Emerald, Cinahl Plus and Health Business Elite. The searches where concentrated using keywords relevant to the topics as listed in the main headings. Examples of these include, “electronic healthcare records”, “paperless office”, “lean management in healthcare”, “patient Flow” and “managing flow in healthcare”. Internet search engines such as google and google scholar were utilised to access all available literature.
2.2.1 PAPER VERSUS ELECTRONIC RECORDS

The issue of a paperless office has been a debate for a few decades, however, according to Sellen & Harper (2003) this has not made much ground. With the technological advances in computer software over the last few decades Jervis & Masoodian (2014) state that technology threatened to render paper obsolete, however most offices continue to use paper in some way. This can be seen in the writer’s organisation where there is a strong relationship between technology, service delivery and paper.

One of the first debates highlighted in the literature is that of cultural and social theory surrounding the application of technology in place of paper, Rogers (1995) suggests that to accept a new innovation, knowledge of how that innovation will affect the process of interest is paramount, but Smith & Correa (2005) warn that many current operational processes in healthcare are firmly entrenched.

This leads to the point of education when implementing change. A project management plan is important in helping engage the support of team members and maintaining momentum (Portny, 2001). In relation to electronic document management Raas (1999) speaks of the importance of informing staff of the exact stage of a process and, that this can be achieved using electronic resources.

Although most of the available literature refers to the move to a complete paperless environment, this project is focusing on only one aspect of record keeping. However,
most of the points raised in the literature are applicable in any service environment and at all levels of aspiring to paperless record keeping. As Jervis & Masoodian (2014) and Sellen & Harper (2003) suggest the paperless environment is far from being a reality, Pemberton, Buehring, Stonehouse, Simpson, & Purves (2003) feel that a paperless healthcare environment is unachievable, that there is a need for integration of both paper and technology. Therefore, perhaps the writer has a higher chance of success with aiming for a smaller aspect of change to an internal process.

The financial benefit of technology is explored by many, Carr (2005) quotes a national filing survey which states that over 1 million pounds are wasted on a daily basis searching for lost paper files and that 2% of lost files are never found. Pemberton et al (2003) inform us that the financial cost of producing paper based files can be significant and that the use of computer based systems can reduce costs.

The initial outlay in setting up an electronic system can be high (Smith & Correa, 2005). However, in the case of the writers proposal the technology is in place and the project can be achieved on a cost neutral basis. There is also a financial implication in the storage of paper files. The storage and sharing of paper files is discussed by Pemberton et al (2003) to highlight the difficulties that can arise, such as primary care physicians sharing patient details. Fisher & Tuck (1997) suggest a co-ordinated approach to the development of delivery systems, to minimise on duplication and cost. Too much paper in any organisation can lead to confusion and waste (Carr, 2005). With the availability of electronic resources companies cannot afford to be complacent. In a study by McMullen (2011) it was found that with the availability of high volume
printers, it seemed to encourage indiscriminate printing and copying. This issue is offset by Falk (1999) who brings forward the idea of scanning, importing and indexing documents, which allows user to view all records available without the need to reproduce the document.

With the advancement in mobile technology electronic records are more widely accessible Jervis & Masoodian (2014) speak of the ubiquitous interaction between computers and mobile devices and how this liberates documents from the constraint of the desktop. This concept is of importance to the writer, as the aim of this proposal is to allow staff within the organisation to locate patients without having to make contact with the department. Importantly Raas (1999) points out that although electronic recordkeeping is designed to make information easily available there is a need to protect sensitive material from unauthorised access.

Fisher & Tuck (1997) continue by highlighting the issue of different technologies used for documentation. As stated earlier, the writers department encompasses the use of two computer systems to capture patient data. These two programs run independently and capture different data. It is the writer’s opinion that this is not of concern when moving forward with this project as both programs capture different aspects of the patient journey.

From the literature it is clearly identified that there are many aspects to achieving a paperless environment. There are many issues highlighted about the implementation of electronic records and it has been identified that staff need education and training,
there needs to be clear and concise guidelines regarding what information needs to be recorded and that there is involvement from the key stakeholders. Carr (2005) feels that the objective should not be to get rid of paper in its entirety, but that we should try and bridge the gap to create a less paper environment. The study carried out by Jervis & Masoodian (2014) concludes that paper documents are still widely used and that despite technological advances, people still have difficulty managing their paper and electronic documents. This compels the argument of both Carr (2005) and Pemberton et al (2003) for the need for better integrated paper and electronic records management systems. Jervis & Masoodian (2014) provide some guidelines to facilitate the development of more effective systems, although they state the systems should be guided by the specific needs of an organisation.

2.2.2 LEAN THINKING IN HEALTHCARE

To begin Nicholas (2012) informs us that Lean production methods used to reduce, eliminate waste and improve processes in manufacturing are now being used in the healthcare setting. This is supported by D’Andreamatteo, Ianni, Lega, & Sargiacomo (2014) who state that Lean is increasingly adopted in healthcare and is developing into a major strand of research. We are informed by Radnor, Holweg, & Waring (2012) that a review on the use of such methodologies in the public sector revealed that 51% of these publications focused on the use of Lean.

Venkateswaran, Nahmens, & Ikuma (2013) point out that lean strategies in healthcare aim at improving patient throughput reduce error redesign workflow, improve patient safety and reduce cycle times. This is vindicated by de Koning, Verver, van den
Heuvel, Bisgaard, & Does (2006) who describe operational inefficiencies as a significant contribution to healthcare costs. This is imperative in relation to the writer’s project as it is hoped that with the removal of waste, operational inefficiencies can be improved.

To define Lean is difficult, however Radnor et al (2012) tell us that the core philosophy of Lean is to continually improve a process by removing non value added steps which are waste. This is often described in the literature as Muda (Japanese: Waste). To focus on waste alone would hinder the use of Lean, therefore, Womack & Jones (1996) discuss the use of five Lean principles to assist the process. They suggest that when used in assessing an organisational process they can identify where one can add value, reduce waste and continuously improve.

The first record on the introduction of Lean in the healthcare setting is recorded in the United Kingdom’s National Health Service in 2001 and in the USA in 2002 (Radnor et al., 2012). We are informed that there is a large variability in the application of lean with differences in scope and approach (Radnor et al., 2012). This is compounded by Brandao de Souza (2009) who informs us that the majority of healthcare institutions focus on small projects to achieve pockets of best practice as opposed to a system wide approach. One of the first papers published on the use of lean in healthcare is by Young, Brailsford, Connell, Davies, & Harper (2014) and they inform us of the study they carried out which addresses the use of industrial processes in relation to improving patient care. They examined three different approaches, those being, Lean, the Theory of Constraints and Six Sigma. Their findings concluded that all three have similar features and all three identify, that in order to be utilised effectively, weak links
and bottlenecks need to be identified and remedial actions put in place. They suggest that in order for them to work in healthcare, there is a need for strong leadership and employee participation.

In an already established healthcare system, the implementation of lean principles is bound to have an effect on not only the system but also the people who work within the system. Poksinska (2010) informs us in their review that lean in healthcare is primarily implemented as a process improvement tool and can fail to interlink with an organisation's culture and strategy. This is supported by Dahlgaard & Dahlgaard-Park (2006) who suggest that Lean is often so focused on process improvement that is can lose sight of the people involved. Conversely Drotz & Poksinska (2014) remind us that in healthcare medical studies often describe a state before and after an intervention, with little thought given to the actual intervention or the implementation process which includes the employees role, behaviour and engagement in the process. Drotz & Poksinska (2014) go on to inform us that the most frequently highlighted barrier to the implementation of lean in healthcare is the staffs disbelief that it can be applied to healthcare when its origins is in the motor car industry. The Harvard Business Review published a paper in 2005 which set about challenging the school of thought that how can healthcare professionals ensure that the quality of their work matched their knowledge. Spear (2005) claimed that learning how to improve the work one does while doing it can have extraordinary results saving lives and money. He continues by stating that some hospitals are making great short term improvements and are radically improving the effectiveness of patient care by employing the operational designs of the Toyota Production System.
Drotz & Poksinska (2014) conclude following their study that the implantation of lean into a healthcare setting has a huge impact on employees (mainly positive) even though there is little emphasis on it within the literature.

As previously stated the implementation of lean is often mal-aligned with an organisation strategy Al-Balushi et al (2014) ask the question is healthcare ready for the implementation of lean. They conducted a comprehensive literature review and they suggest that little evidence exists of a consolidated methodology for applying lean principles to the context of healthcare.

Although there are many text books in circulation which describe lean and its application Al-Balushi et al (2014) argue that they do not provide any tested methodologies to its application in different contexts. Radnor (2011) reminds us of the complexity of healthcare and how the focus of lean is more on the tools and techniques rather than the readiness of an organisation which can lead to a lack of sustainability.

Organisational readiness is described by Weiner (2009) as any practice that aids transformation by eliminating inhibitors and providing the knowledge required to succeed in establishing change. The study by Al-Balushi et al (2014) looked at the fundamental mechanisms needed to launch a successful lean project in healthcare and their findings conclude that organisational readiness plays a significant role. They conclude that culture, communication, different user groups, the complex nature of healthcare and staff training and encouragement are all important factors to consider when implementing the use of lean.
The use of process improvement methodologies is widely discussed in the literature. We have discovered the 51% of publications focus on lean. Although the use of lean is evident, many describe its application to healthcare as patchy and fragmented (Burgess & Radnor, 2013). The issues of organisational readiness was highlighted and how any process improvement initiative needs to be in alignment with an organisation's vision so it can become the cultural norm. Following their evaluation on lean, Burgess & Radnor (2013) indicate that lean continues to be popular within healthcare and its implementation has become widespread. Managers are using it at different rates, some tentative, whilst others are taking a system wide approach. Finally they suggest that healthcare organisations are evaluating their lean approach in line with their organisational strategy.

2.2.3 PATIENT FLOW

Waiting times, delays and cancelations play a significant role in today's healthcare environment, so much so that Haraden, Nolan, Resar, & Litvak (2003) counsel that both patients and providers assume that waiting is a necessary part of the healthcare experience. From this, as National targets are introduced, some healthcare providers are calling for an increase in capacity to allow them to provide a service which meets demand, however in the recent economic climate this would not be a solution (T. S. Waring & Alexander, 2015). Silvester et al (2004) put forward the idea that demand does not exceed capacity, they state that if demand is greater than capacity we would see an inexorable rise in waiting list. Martin et al (2003) inform us that climbing waiting lists are a rare phenomenon.
The concept of reducing and eliminating queueing in healthcare has been approached from different schools of thought for example Lean thinking has been applied and as discussed above has a significant place in healthcare. It is suggested by Silvester et al (2004) that some organisations keep resources at 100% in the misguided belief that use correlates to efficiency, therefore, having a queue feeds the resource with work. In a patient's journey one of the steps tends to be a bottleneck, and Silvester et al (2004) tell us that with a varying demand and bottleneck capacity, a bottleneck cannot be kept at 100% use. The work of Erlang in the early 1900’s on the concept of queueing is discussed by (Palvannan & Teow, 2012). They demonstrate how the use of bottlenecks can create queues. Another argument is that queues discourage people from using scarce healthcare resources, and that the appearance of an overburdened system offers protection to clinicians to what they believe to be an untenable demand.

The issue of variation between demand and capacity is highlighted in many articles and it is suggested by Silvester et al (2004) that work on this hypothesis will yield the greatest result. They state the even when average capacity may be equal to average demand, a queue will develop due to random fluctuation in demand and capacity. The Institute of Healthcare Improvement through their Innovation series address this topic. Haraden et al (2003) inform us that with using this initiative, hospitals have been testing the theory of improving patient flow by analysing variability throughout the hospital system. The focus of this work is around variation at times when capacity does not meet demand. The Institute of Healthcare Improvement put forward a methodology the help hospitals engage is this process. They suggest that the first step
of improvement is to evaluate an organisation's current flow, and ask, how often you get it right. A study carried out by Olsson & Aronsson (2015) into managing a variable acute patient flow approached their work in this way. They commenced their study by collecting empirical evidence from their institution. Haraden et al (2003) continue by discussing the importance of measuring and understanding flow variation. They subdivide variation into random and non-random. Random variation is defined as the number of patients presenting with certain clinical conditions, the ebb and flow of when they present and the professional variability of having an appropriate skilled clinician available. Non-random variation is described as a variation which may be driven by individual priority for example theatre list which are busier on specific days.

Both of these variations need action. Random variation must be understood and managed as it is impossible to eliminate. Haraden et al (2003) tells us that the only way random variation could be eliminated is if all patients had the same disease and severity and arrived at the same rate ever hour. Non-random variation should be analysed and eliminated. Finally Haraden et al (2003) suggest that changes to patient flow need to be tested in order to analyse if an improvement has been attained.

Waring & Alexander (2015) remind us of how accessibility and inpatient flow is a growing problem for acute hospitals. They explain that although there are many examples of operations research, for example to work of Capkun, Messner, & Rissbacher (2012) that this theoretical work is not easily put in to practice in the healthcare field. There are few published reports in research journals in relation to accessibility and flow (Eriksson, Bergbrant, Berrum, & Mörck, 2011). This lack of published papers may be due to the complexity of implementation (Kenis, 2006).
2.3 SUMMARY

The three topics highlighted have been reviewed and discussed. The issue of the paperless office concluded with the idea that a paper light office is most achievable. And that the integration of paper and software is best achieved locally to what best suits the needs of an organisation.

Lean management in healthcare has emerged as an ever improving concept. From its early inception in healthcare where it was used for small local improvement, we are now seeing system wide initiatives which are in line with the strategic plan of healthcare organisations.

The issue of patient flow although well discussed has only a small amount of available literature citing improvement initiatives. The barriers to effective patient flow are highlighted and improvement methodologies are available. It is the opinion of the writer that although not many large scale patient flow improvements are discussed, it is believed that the smaller lean management projects undertaken in institutions are yielding small results in patient flow which will hopefully encourage people to undertake larger scale projects.
CHAPTER 3

3.1 INTRODUCTION

To implement a successful change project, it is necessary to have an understanding of organisational development. This chapter will address these issues and will discuss methodologies associated with organisational development. To understand how an organisation operates and behaves, an assessment of the organisational culture is paramount. Muldrow, Buckley, & Schay (2002) tell us that employee behaviours and attitudes are elements of organisational culture which will affect the implementation of any new process. This highlights the importance of early assessment and communication.

To affect change in any situation can be difficult, therefore, the use of a structured plan is recommended (HSE, 2008). The use of a change model is indicated and in this instance the model chosen is the Health Service Executive change model as it was deemed the most appropriate for the project.

The writer will continue by discussing change models, the rationale for choosing the above model and how it was utilised to implement this project. The chapter also explores organisational development and in particular how it can be effected by institutional culture.
3.2 MODELS FOR CHANGE

The practice of change management is well discussed in the literature. There are many theories which support the change process. The first to be addressed is the work of John. P. Lewin., Lewin’s model incorporates 3 phases. The first phase is called the unfreezing stage, this is where the culture and attitudes of an organisation are assessed. It is documented by McAuliffe & Van Vaerenbergh (2006) that this is imperative to the success or failure of Lewin’s Model. The second phase is where change happens, the moving phase, from a status quo to a new way of operating. The third phase is the refreezing stage, which implies the when change has occurred it must be entrenched. It is the writer’s opinion that this approach is to prescriptive for use in the healthcare setting as it does not seem to allow for any variation in the approach taken during the change process.

Kotter’s eight step model for change was considered for use in this instance. (See Appendix 1) This model for change focuses on a linear step by step pathway to achieving change, developed from a ten year study of the successes and failures of organisations attempting change (Kotter, 2007). This model provides a very clear guide for help in achieving a positive outcome whilst introducing change, however, Oakland & Tanner (2007) warn of how many change initiatives fail if progress is stalled or misdirected. The writer feels that this model does not leave room for deviation, which should be expected in the area of unscheduled care within a hospital.

The Irish Health Service Executive (HSE) published a report in 2006 which reviewed theoretical change models and their use in relation to the Irish healthcare system.
McAuliffe & Van Vaerenbergh (2006) inform us that their work can be used as a guide for managers and staff to support change. Following on from their work, the HSE published in 2008 a report on managing change in respect to the complexities of the Irish Healthcare system. In this report they put forward their change model (Figure 1). This model is described by HSE (2008) as being developed through the adaptation of other models. It has a cyclical process, with a continuous approach, with all steps influencing and being interrelated with each other.

Figure 1

The organisational development approach used by this model has a strong emphasis on people and teams within the HSE. It has been designed specifically for the Irish system and for these reason the writer choose this model for the change initiative. The importance of staff engagement is a common theme throughout the literature (West & Dawson, 2012) (Kotter & Schlesinger, 2008). As previously mentioned, to gain staff involvement and maintain their commitment to change, one must have a clear understanding of the current attitudes of staff within an organisation. To continue the writer will discuss the relationship between culture and change.
Organisational development (OD) is discussed by Grieves (2000) who informs us that OD had its origin in the 1950’s, but it was a decade later that it started to flourish with the introduction of Lewin’s model for change, among other theories. It continued to develop throughout the last century to present day where we find a well-developed discipline.

Organisational Development in healthcare is introduced as a practical way in which change in the health services can be achieved. Hopkins (2006) states this is acknowledged by the Health Service Executive who put together a taskforce to develop their model for change.

Kotter (2007) in his paper on leading change cautions on the failures of some companies that do not place enough emphasis on who is involved in their initiatives. A common theme emerges from the literature surrounding OD and the barriers it can face. Ford, Ford, & D’Amelio (2008) tell us of how resistance can occur when a change agent does not have a full understanding of the position of a change recipient. From this it can be determined that before any plan to implement change is put in place the organisations culture must be analysed.

To understand culture Hofstede (1980) describes it as a mental programming of people in an environment. Drennan (1992) compels this by saying culture is how things are typically done in an organisation. The framework by Goffee & Jones (1998) (see
Appendix 2) highlights that there are many different cultures within an organisation, all of which have strong and weak points. Handy (1979) continues to explain that all cultures are good in the right place, because, each have their strong and weak points.

The author decided that an analysis of the cultural in his own organisation was important to develop a good starting point. Before discussing the outcome of the cultural assessment it must be noted that assessment was based on the Emergency and Patient flow Departments. The hospital as an organisation was not assessed. Lunenburg (2012) explains how organisations can be divided into departments. This can allow for an organisations overall goal to be achieved in different sections in different departments. This can be applied to the two departments involved as they provide immediate care and continuous flow for the patient, while working towards the hospitals goal of delivering quality holistic care.

Part one of the framework provides an observational checklist covering the aspects of, physical space, communication, time and identity. Each of these aspects are addressed by using four cultural types, rational, mercenary, fragmented and communal. Following the writers assessment, the physical space was assessed as having a mercenary culture. This assessment was based on work space being communal with not dedicated work space for individuals. Communication was also assessed as being mercenary, as all communication between the Emergency department and Patient Flow department is always direct and to the point. The mercenary nature of the culture continued when time was assessed. Time is well structured for both areas as well as working towards time driven targets. Identity was the last aspect assessed and this proved to have a networked theme. This was based
on the fact that a lot of the staff have worked together for a long time and have a good
degree of sociability. All staff are there for a common goal which provides for a close
sense of community.

Part 2 of the framework which is the corporate character questionnaire was completed.
The score was correlated and applied to the scoring key which results in a score of 44
for sociability and 43 for solidarity. These results were then applied to the bar chart
with cultural quadrants, it provided an assessment of a communal culture. Part 3 of
the framework assess if the culture has a positive or negative balance. After answering
the six questions proposed, it highlighted that the communal culture of both
departments had a positive aspect. The framework continues with part 4 which looks
at critical incident analysis. On completion of the scenario based questionnaire, again
it shows a positive aspect to the culture.

In summary, the initial observation checklist leaned towards a mercenary culture,
however, when the corporate character questionnaire was completed we see a high
level of sociability and solidarity and this gives an assessment of a communal culture.
The following two parts of the framework both advise of a positive culture, emergency
and patient flow departments by their very nature tend to be stressful areas to work.
The staff often have strong personalities who work independently and as part of a
team. In a stressful situation like an overcrowded Emergency Department staff can
develop strong and immediate alliances to give their best efforts to help alleviate the
situation. While using Goffer and Jones framework, the writer was not surprised by the
observational checklist showing a mainly mercenary culture. It was felt that perhaps
this was correct, however as the assessment continued and a positive culture
emerged, the writer was somewhat surprised. This learning curve is supported by Goffee & Jones (1998) who describe the characteristics of a communal culture. We are informed of teamwork, participation and the group’s ability to pursue shared objectives in both long term initiatives and short term goals.

3.4 THE CHANGE PROCESS

As previously stated the HSE’s model for change was selected for this project which HSE (2008) state was developed to continuously improve the experience of patients and service users and to promote a consistent approach to change across the system. The writers’ project was implemented on a phased basis using the four steps within the model. Each of these steps will be explored to provide a detailed account of the process.

3.4.1 INITIATION

HSE (2008) inform us that this initial stage is to create a state of readiness, to scope out how and with whom you will engage. We are cautioned again about the importance of preparation and reminded that accurate planning is critical to success. Kotter (2007) puts a compelling case for the initial plan and states that over 50% of companies fail at the first step.

Working as a Clinical Nurse Manager in the Emergency Department I have responsibility for the daily organisation of patient flow through the ED. As a Shift Leader I am charged with identifying patients who have been admitted by a specialist
team and who require transfer in-house. This process as outlined in chapter one is lengthy and as such I envisaged that it could be improved.

I considered the idea of using Symphony to record more details in relation to the patients’ journey through the ED and wondered if it could be achieved. I decided to make some inquiries with staff to see if this was achievable. I initially approached the IT Administrator for Symphony to ask if it was possible to add further stages, for example, a final destination for a patient in an attempt to reduce our current paper records. The Administrator had previously considered the idea in a discussion with the Chief Operations Officer in relation to improving patient flow so could tell me straight off that it would work.

I informally held discussions with my Nurse Manager colleagues about the idea and they were all of a similar opinion that it was a good idea. Similarly, I contacted the Patient Flow Managers and the Unscheduled Care Manager to gauge their feelings on the subject. Although they thought in essence it was good, they clearly identified they would not commit to any change without an appropriate review. However, they did state that due to Governmental targets and ED overcrowding that they were under considerable pressure to improve patient flow and would be happy to discuss any initiative which may help. From this I felt that there would be a sense of urgency to this project if it was obtainable.

This lead to the next phase of my initial assessment and that was to clearly identify who would be involved in the project and what level of power would they bring. I
conducted a stakeholder analysis. Dixon-Woods, McNicol, & Martin (2012) talk of the importance of being aware of who is involved in a project and at what level.

**Figure 2**

**Power/Interest Grid**

<table>
<thead>
<tr>
<th>Director of Nursing</th>
<th>Chief Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>Officer</td>
</tr>
<tr>
<td></td>
<td>Patient flow</td>
</tr>
<tr>
<td></td>
<td>Unscheduled care</td>
</tr>
<tr>
<td></td>
<td>Bed managers</td>
</tr>
<tr>
<td></td>
<td>ED CNM</td>
</tr>
<tr>
<td>ED Medics</td>
<td>Clerical staff</td>
</tr>
<tr>
<td></td>
<td>ED Nurse</td>
</tr>
</tbody>
</table>

From this it is apparent that the main stakeholders have a high level of power and high level of interest. Following on from this a SWOT analysis was conducted to evaluate aspects of the project.

The SWOT (strengths weaknesses opportunities and threats) framework is proposed as an analytical tool used to categorise environmental factors internal and external to an organisation which Pickton & Wright (1998) used to help in the development of organisational strategy. However, Wijngaarden, Scholten, & Wijk (2012) argue that
little empirical research has been conducted for its use in the healthcare setting. However, as this organisational development project is not based on strategic development, the author feels it is a useful tool to help identify factors which may influence the success of the project and support its implementation.

In carrying out this analysis it became obvious that the greatest strength of the project lay in governmental targets. This had previously been highlighted by the patient flow department as a driving factor. Another strength discovered was the sponsorship for the project received from the hospital Executive Management Team. A weaknesses which was identified centred on the financial aspect of this project, and although it could be achieved on a cost neutral bases, the change from paper to electronic records would have a negative affect for the Out of Hours Site Managers who would benefit from having portable access to Symphony, as they are not office based. This weakness, however, highlighted an opportunity to gain financial support from a charitable foundation within the hospital which offers monetary grants for quality improvement initiatives. A threat identified came from the cultural analysis carried out which suggested that the departments involved, were submerged in a mercenary culture and may not embrace change. This led me to commission a questionnaire.

The questionnaire (see Appendix 3) comprised of 4 questions to assess how staff felt about the current process if they would accept a change and if they felt a change would improve patient flow and decrease the workload on staff. The questionnaire was distributed to all staff in the Patient Flow Department, the Nurse Managers in the ED and the Out of Hours Site Managers. Twenty questionnaires were distributed with a response from all twenty recipients. All of the responses support the writer’s analysis
of the need for a process improvement and all felt it would support an improvement in patient flow. The results of how the project might affect workload were less supportive with 35% of responses stating it was unclear if it would improve workload. From the results of this questionnaire, it was determined that the key stakeholders were supportive of the project. With this preparation in hand the project moved to the planning stage.

3.4.2 Planning

The HSE Change Model determines that the planning stage of a project is to determine the specific details of the change and to develop support associated with the process (HSE, 2008).

Building Commitment:

Kotter (2007) informs us that in order to successfully implement change one must create a coalition with invested parties and suggests that if this is not achieved transformation is more likely to fail. In order to gain commitment HSE (2008) state that a shared vision is paramount and that this must be evaluated early in the planning stage. In November 2015 I convened a meeting with the key stakeholders to present my idea of change. This was accomplished through a power point presentation. I requested that my colleagues review this presentation and add their opinions so we could reach an agreed vision going forward. We agreed at this time that we would have regular meetings to maintain open communication, whereby all members would continue to uphold a sense of involvement.
Determining the details of the change:

As this organisational development project was based on the theory of lean management it was in the first instance appropriate to process map the steps in our current routine of organising emergency admissions through the ED. (See Appendix 4) Trebble, Hansi, Hydes, Smith, & Baker (2010) put forward the principle that process mapping is a valuable tool in identifying problems and suggesting improvements. This is achieved by categorising the steps into value and non-value added steps. As stated in chapter two Radnor et al (2012) counsel that the identification and removal of non-value added steps is imperative to achieving continuous improvement.

In early January 2016 a conclave of staff involved in the admission process was assembled to assist in the development of the process map. This is supported by Trebble et al (2010) who advise on a team of key players. With this process map, I identified some non-value added steps and again conferred with my colleagues to gather their opinion. It was envisaged at this time with the change to electronic records that some current steps within the process which were determined to be of value may become non-value steps following the commencement of the change. Simultaneously, a separate meeting was held with the ICT Administrator to commence discussions around the development of our computer software to incorporate the electronic recording of patient destinations within the hospital. Finally, preparatory discussions were held on the consequence of the development of paperless elements to the process.
With these ongoing meetings all persons involved had an opportunity to express their thoughts on the project, which gave all members a sense of determination to continue, which allowed the project to move to the phase of developing an implementation plan.

**Implementation plan:**

Having communicated effectively with the key stakeholders, I proposed that we proceed to plan an implementation strategy. In January 2016 I held our first planning meeting. At this meeting I presented the findings of our previous analysis on the detail of the change and gained approval from those involved. This involved the refined process map following the removal of wasted steps. (See Appendix 5) At this initial meeting it was confirmed that the computer update would be in place by the end of February which would facilitate staff training. HSE (2008) confirm that by compiling the detail of the future state, it will bring a sense of reality and help people to experience the potential of the change.

Meetings were held at two weekly intervals to address issues and develop our plan. The HSE support a who, what, when, where design to the plan. As the project lead, I devised a structured plan for moving forward. In consultation with the project team, a date was set for early March to commence training of staff, once the IT system update was in place. Education surrounding change is an extremely important element to consider. Bajnok, Puddester, Macdonald, Archibald, & Kuhl (2012) suggest that inter-professional collaboration and effective communication are essential for improvement.
Utilising a team approach the core elements of the plan were divided among the group. I as the project lead took responsibility for training and communication. The ICT administrator developed a tactic to ensure all appropriate staff had user name and password access to interact with Symphony. The Patient Flow Manager took charge of increasing awareness throughout the Patient Flow Department. We instigated a timeframe to adhere to the plan and set an initial launch date for the 4th of April. The launch date was set and all involved felt that a two week trial period would facilitate all staff with the opportunity to use the new system and timely enough to allow staff to develop their opinion on how the project is working. It was also envisaged that on the launch date that the new system would run concurrently with usual practice, to further secure a smooth transition to the new way of practice.

To communicate the progress of the project I developed an updated power point presentation to deliver to staff not directly involved to ensure organisational awareness. The ED has a Clinical Microsystems Group in operation and through this forum they publish a monthly ED newsletter. I approached the group and requested to have the project plan included in their next publication to reach a wider audience.

The HSE model for change communicates a need to establish a review of resource requirements. The Symphony update was to be achieved at only the expense of time associated with the workload of the ICT administrator. As she had a considerable workload at the time, I requested from the Chief Operations Officer that she may do 16 hours of overtime to ensure the project remain on target. This was approved and resulted in no time delay. As previously stated the use of a hand held computer tablet was deemed necessary for the Out of Hours Site Managers to allow them access to
Symphony while on ward rounds and with the granting of a monetary award, this will be achieved. Unfortunately, the process of applying for this grant was timed outside to timeframe of implementation, however, the group felt that although it is beneficial to the project, it was not a reason to postpone the launch date.

As we moved towards the launch date, regular meetings and staff training continued to ensure preparedness. From this implementation plan it can be seen that a detailed plan had been achieved and agreed, which would foster an even changeover as the project moved to the implementation stage.

3.4.3 Implementation

Implementing Change:

As planned the project was launched on the 4th of April with all staff ready to embrace the change. HSE (2008) articulate that this stage of the process focuses on the implementation and monitoring of the plan to ensure it meets its objectives.

As the project commenced on the first morning the initial task was to abandon the practice of printing a copy of the list of current patients in ED awaiting disposition. This list would usually be copied to the patient flow department, but as we had agreed, we would commence with the visual representation of the current ED situation by utilising Symphony. At this very early stage the project received some negative feedback as some personal expressed initial difficulties with the paperless aspect. As we learned in chapter two the literature would suggest that a complete paperless healthcare
environment is unachievable, however, Raas (1999) reminds us that through continued support and education this may be overcome. As I had developed a strong plan and also a strong allegiance with the staff, I knew that this early hesitance could be abated. Indeed, early intervention proved tactical as I developed a support network within the key stakeholders to assist with the paperless aspect, to allow weaker members let go of old practice.

As the Project Manager for this change initiative it was imperative that I was available on the launch day to support staff. I liaised with staff early on launch day and was there to address issues as they came to light. This is supported by the HSE who identify the importance of the availability of managers (HSE, 2008).

It became evident early on that the transition was running smoothly and that our effective planning had been successful. The trial period was to run for a fortnight with feedback to follow.

A meeting was held on the 18th April to assess the progress of the project. It was detailed at this meeting that the new system was working extremely well and that the majority of staff were complimentary. However, the trial period had highlighted some areas of concern which were not discussed in the planning stage. The process map which was developed had shown areas of non-value and these had been removed. One of these steps, was the clerical officer in ED contacting the admissions office when a new admitted patient was identified. As the hospital software for inpatient management differs from that of ED, the patient flow department use two different programmes. They raised a concern that patients may be added in ED and unless
they receive a call to notify them, they may miss a new admission. A discussion was held on how to overcome this difficulty and it was decided that a large screen monitor placed in the Patient Flow Department could display Symphony at all times and allow the Bed Managers quick reference to new admits in ED. It was agreed until this monitor is in place, that the step of the clerical officer making contact with Bed Management would continue. The cost of this monitor will be met by the grant I was awarded for this quality improvement initiative.

**Sustaining Momentum:**

The HSE caution on the importance of sustaining momentum which can provide longevity to change. Nicholas (2012) advise how senior staff and leaders must have a positive connection to a change initiative to keep it alive. Dixon-Woods et al (2012) support this with the theory that if an intervention is developed with staff they are much more likely to foster a sense of ownership.

This project from the outset has been developed and implemented with the support of all staff from senior management to staff on the frontline. Through their willingness and collaboration I find myself with a new development project, which has been embraced and claimed as having a positive effect on working conditions, which will be further discussed in chapter four. To support this and continue the positive momentum, regular meetings will continue with staff to address any concerns. I will also regularly display our improvement in patient experience times as an incentive to staff to remain engaged and motivated.
3.4.4 Mainstreaming

This final step in the HSE change model looks at how new practice can be embedded into every day practice and become the way of doing things. The perceived need for change in this instance was a strong driver when implementing this change and as such will be a support in mainstreaming the change. Fernandez & Rainey (2006) report that, projects that are grounded in a developed sense of need for change have a better outcome. HSE (2008) confirm that acknowledging success is an important tool in gaining continued support of any change initiative. The shared feeling of improved workload and progress in reaching governmental targets will assist here. The poster representing this project will be displayed in both the ED and Patient Flow Departments to disseminate the results of the project.

3.5 Conclusion

This chapter has addressed organisational development and the methodologies surrounding it. In particular the importance of cultural assessment and how it can determine the outcome of an OD project was outlined. The rationale for using the HSE model was put forward and the projects development was charted using this model.

This improvement initiative was implemented successfully and this can be attributed to the use of the HSE change model. Van de Ven & Sun (2011) discuss the issue of using a structured model for success in managing change. The foundation of the project lay in identifying key stakeholders and having an awareness of the prevailing
culture which allowed for the growth of an inclusive team, which in turn reduced resistance and supported implementation.
CHAPTER 4

4.1 Introduction

To understand the importance of evaluation, it is firstly important to define evaluation. Lazenbatt (2002) describes evaluation as a “method of measuring the extent to which an intervention achieves its stated objectives”.

Measurement can be used to evaluate different outcomes, for example, accountability, research and improvement. In the healthcare setting measurement is the biases of identifying how an organisation is contending with national standards. Shaw, Bruneau, Baskia, Jong, & Sunol (2003) inform us that measurement is paramount to quality improvement within the hospital setting. They suggest, there are many measurement tools in use for example, regulatory inspection, patient satisfaction surveys and even third party assessment. Solberg, Mosser, & McDonald (1997) state that although each element of measure is important, they should be considered one by one.

Evaluation in healthcare is used to determine the value of an initiative against a standard (Green & South, 2006). Such evaluation can be based around, treatments, services, policies, and changes to an organisation (Ovretveit, 1998). Therefore, it is imperative to produce an architectural structure using the key stakeholders. Lazenbatt (2002) provides an evaluation cycle as a guide. In the literature, this is referred to as a planning evaluation tool and Ovretveit (1998) supports this, with information surrounding planning issues and selecting the appropriate people to carry out an evaluation.
In a healthcare setting Parry, Carson-Stevens, Luff, McPherson, & Goldmann (2013) suggest using theory-driven formative evaluation, informed by two primary considerations, firstly, the degree of belief in the new concept and secondly, the rationale for the overall approach including, how and to whom to teach improvement methods. Kirkpatrick & Kirkpatrick (2006) provide a framework which is useful when considering the approach put forward by Parry et al. The Kirkpatrick framework looks at four levels of learning opportunities, experience, learning, behaviour and results. Parry et al (2013) cite how the Kirkpatrick framework, for a quality improvement initiative, helps describe a program theory, which is defined as a chain of reasoning for the activities involved in an initiative, through to the change in processes and outcomes expected.

From the above we can see that to undertake any form of quality improvement initiative, it is important to have a clear understanding of what is to be evaluated and how it is to be measured. Parry et al (2013) go so far as to put forward a guiding question for the evaluation of healthcare “How and in what context does a new model work or can it be amended to work?” Once this has been established, a program theory can be utilised to achieve the best outcome available. We have seen from the literature that there are many aspects to evaluation and without clear insight, evaluation as described by Solberg et al (1997) can be like a “loaded gun and dangerous if misused”.

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4.2 Evaluation of the Change Project

In considering the impact of this project, appropriate evaluation was necessary to understand if the project met its objectives. In chapter one of this paper the main objectives are highlighted. In assessing these objectives, the writer was of the opinion that it was most appropriate to be guided by the CIPP (Context, Input, Product, and Process) evaluation model. This model was chosen as the writer feels it best suits this project, as it allows for evaluation from the outset. We are reminded by Linzalone & Schiuma (2015) that there are many evaluation models in existence, and that the literature suggests that there is no one size fits all approach to evaluation. Stufflebeam (1983) noted that many approaches to evaluation were rigid in context and as such, further developed the CIPP model to provide a more adaptable approach which can lend itself to different situations. McNamara, Joyce, & O'Hara (2010) articulate the difference between summative and formative evaluation. They describe summative evaluation as a retrospective evaluation of a completed program and inform us that, formative evaluation can be used throughout a project to assist in meeting objectives and indeed guiding an initiative.

The measurement of data from this project is a mixture of both qualitative and quantitative data, as it is based around process improvement and waste reduction. Using the CIPP model the writer will address the evaluation of the project under the headings as guided in the model.
4.3 Evaluation Process

4.3.1 Context Evaluation

This heading guided the writer to assess the requirements of the project and what opportunities where available to guide the project, for example, as previously discussed, the requirement to meet national governmental targets. It also provided a guide to direct the aim of the project. This was achieved through process mapping and assessing the organisations desire to change. A questionnaire was developed and distributed to the staff who would by directly involved with and/or effected by the project. This questionnaire examined staff attitude to our current practice. It was circulated to twenty staff members and there was a 100% response rate. As can be seen in Appendix 3 all staff strongly believed that the current process was inefficient and would support a change, however, only 35% believed that it would improve their workload. This evaluation highlighted that this change initiative was demonstrably worthwhile, this is supported by Drotz & Poksinska (2014) who claim that working conditions will improve through the application of lean principles to work practices. The evaluation also proved that engagement with key stakeholders and regular planning meetings would help to further develop the context of the project to ensure it met the first objective as set in the project proposal.
4.3.2 Input Evaluation

This section of the evaluation cycle demonstrates the effective planning surrounding the project and the assessment of resource allocation. This was achieved through a PowerPoint presentation on the development of the project. The importance of organisational readiness is supported by Weiner (2009) who states the communication is a principal necessity to successful change management. The main input of this project surrounded a software update for Symphony and staff training to facilitate this upgrade. This objective was achieved within the timeframe set as out. All appropriate staff received support surrounding the use of Symphony with individual training sessions offered to all staff outside the ED. This training was taken up by all staff in the Patient Flow Department without exception. As the evaluation framework was utilised from early on in the process, it was identified that without suitable training for the user group, the project would have encountered considerable delay. The employment of process mapping was also evaluated at this stage. A process map of the current organisational practice was devised (See Appendix 4) with the support of the project working group, which allowed for the identification of waste. The process map outlined thirteen steps, seven of which were removed in the new process (See Appendix 5) signifying over a 50% reduction in workload for staff.

4.3.3 Process Evaluation

This element of the cycle allowed planning for the introduction of the new process, for a trial period of two weeks. This was accomplished through regular emails and an updated PowerPoint presentation to all staff to encourage engagement in the new
process. The new process map, with the steps identified as waste having been removed, was displayed to all staff, to offer support to them in their new work practice. Following this two week trial, compliance with the new system was analysed which showed 100% compliance, as all patients admitted through ED had a final destination allocated on Symphony.

4.3.4 Product Evaluation

Following the two week trial period, initial informal feedback was requested from staff. This yielded very few responses, with all staff stating they were happy with the implementation of the change and the new work practice. This led the writer to reassess staff attitudes towards the project and so, a further questionnaire was commissioned. This questionnaire was circulated to the same twenty staff members and again 100% compliance was achieved. (See Appendix 6). The results of this questionnaire clearly show that all staff appraised the project and believed that it had achieved its aim. Unsurprisingly, 80% of staff now felt that the change initiative had had a positive impact on their workload, which represents a 55% increase in work place satisfaction.

The final objective to be evaluated was that of the patients experience time. The measurement of these times looks at the patients' total journey through the ED from registration to disposition, that is, either admission or discharge. For the purpose of this project, the particular aspect of the patients' journey being evaluated is from the time a decision to admit is made, to the time the patient leaves the ED to a final destination within the hospital.
This quantitative data was extracted from Symphony, it is a comparative analysis of the time from decision to admit, to when all admitted patients’ left the ED and looks at a period of one month before the implementation of the project and one month post implementation. (See Appendix 7) It is important to note that there was an equal amount of admission over both of these periods and that there was no change to bed numbers within the hospital, or indeed scheduled admissions, which can also have an effect on patient experience times. In assessing patient flow we are reminded of the many factors which can influence flow such as outlined above (Aronsson, 2015). From this data it can be seen that the average ward transfer time, that is from decision to admit to left the ED is 16.06 hours. After to introduction of the project with the reduction in the overall process we can see that the ward transfer time has been reduced to 12.14 hours, which highlights a significant improvement in patient experience times. This improvement can be attributed to this project as no alternative reason is identified.

4.4 Summary

In this chapter the writer has defined evaluation and critiqued various models of evaluation and discussed methods of measurement, in the context of healthcare. The use of the CIPP model was addressed and the rationale for its use in this instance was debated. The literature instructed that the use of a structured method of evaluation is indicated to support data analysis, however, as stated previously, it is argued that each model has its merit, however, there is no one particular model suited to all aspects of evaluation (Linzalone & Schiuma, 2015).
It is the writers’ opinion that evidence of this was demonstrated in evaluating this project. The guiding structure of this model provides headings to support evaluation, however, the content used under these headings is entirely subjective. This requires the evaluator to change their mind set and assumptions in relation to evaluation, however, it is anticipated that this would also be the case in relation to other models.

The writer approached evaluation with the concept of assessing the project and providing details to show that all the objectives of the project had been met. Having correlated the results and observing that this organisational development project was successfully implemented, the concept of data evaluation emphasized another aspect of evaluation. The positive outcome of the project has provided staff with a sense of achievement and indeed pride. This was an achievement that although one might expect to be pleased, has provided staff with a new sense of improved work ethic and a new competitive edge, with staff taking a keen interest in patient experience times and how to further improve them.

This organisational learning has provided the departments involved with a new ideal in relation to evaluation and the writer reflects, that with continued mentoring and communication that new organisational development projects will surface.
Chapter 5

5.1 INTRODUCTION

This Organisational Development Project has its foundation in the laborious task of patient flow. The overarching objective of the project was to secure a quality improvement to a single process involved in the patients’ journey. This thesis puts forward the process involved in implementing a change initiative which took place in the Emergency and Patient Flow Departments of an acute General Hospital in the Greater Dublin Area. The project was guided by a the HSE Model for Change (HSE, 2008) which provided structure to the plan as it was implemented. This project utilised the principles of lean management to improve an aspect of our work by developing staff opinion and using their knowledge and skill to adapt the process to a newer way with less reliance on paper documents and more electronic recording.

This chapter will through discussion, examine my experience of introducing change and I will review the process and show how the literature which was critiqued in Chapter 2 has helped to offer support and structure to the plan. The chapter will continue with a look at the strengths and limitations of the project and propose recommendations for the future. To conclude this dissertation a review of the paper will be presented.
5.2 Project Impact

Change management is a thoroughly reviewed subject and as Kash, Spaulding, Johnson, & Gamm (2014) remind us, two of the main factors attributed to its success are leadership and planning. Bearing this in mind, Van de Ven & Sun (2011) claim that change agents need to be cognisant of the natural change and development within an organisation and adapt their mental model to meet this. The positive outcome of this project can be attributed to the successful planning and involvement of staff. The analysis of departmental culture was strategic and helped secure the continuous momentum which accompanied the implementation.

The results which are presented in chapter four are testament to the success of the project in meeting its aim and objectives. It showed that through the application of lean principles to our working practice, we were able to secure a reduction in experience times for patients. The introduction of increased electronic records was also successful, which is beneficial to the organisation, as it will allow for more accurate data in relation to patient experience times. Overall, the project has had a positive effect on a small area of organisational procedure and this in turn will help within the Hospital as it strives to meet its strategic plan.
5.2.1 Stakeholders

The involvement of key stakeholders is a well-established theme throughout the literature (Fernandez & Rainey, 2006). I approached this project with the initial plan of identifying the key players I would need to employ to ensure the project was a success. However, I was concerned that I was underestimating how individuals may behave when approached to engage in a change program. That is why I in the first instance carried out a cultural assessment, which could then be used to the advantage of the project. Jung, Chow, & Wu (2003) speak of how transformational leadership can be used to support organisational innovation. The use of a stakeholder analysis was also paramount as it offered clear instruction as to who the main players were. Without this prior knowledge, I believe I may have encountered a considerable amount of obstacles which were avoided. The project was carried out over a six month period and was supported by a cohort of committed staff, who showed continuous enthusiasm throughout. Their participation was crucial to the success of the project and I believe this was achieved by presenting them with a cohesive plan, developed from a theoretical model which offered support around change.

5.2.2 Practice.

A long standing institutional practice was put up for review with this project. This was visualised in a process map. On initial consultation with staff I received a lot of comments such as “why change” and “it has always work well” which was to be expected. Resistance to change will always be present where there is an established practice (Waring & Bishop, 2010). To develop the process map I involved all parties
who are involved in the everyday practice, to allow them to develop a sense of ownership and ensure that all steps were captured. Interestingly, I felt that when staff themselves identified all the steps and they were responsible for recognising Muda, that they may be more willing to accept the change. As the new leaner process took shape, staff felt it was necessary to embrace the new practice as they themselves developed it. Similarly, staff had concerns about the reduction in paper records and felt strongly that they “needed” paper. The literature review carried out on the reduction of paper records stated that a paperless environment is essentially unachievable and that paper light is the way forward (Carr, 2005). Through effective communication this obstacle was overcome with ease. This provides example of the importance of engaging in research and planning for all eventualities. The effects of good leadership can be seen at play here, with the result of a new change to an established work practice being developed by staff with a sense of ownership, as opposed to being a managerial imposed decision.

5.2.3 Theory

As discussed the concept of organisational development is a well-defined discipline and to embark on any element of change within an organisation would be remiss without an acknowledgement to the literature. By utilising the knowledge gained from studying the literature, this has supported this project from the earliest planning stage. Weiner (2009) talks of organisational readiness and describes how it relates to both the organisation and the person who is carrying out the change. This was a crucial learning curve for me as I started out on this journey and help me in my preparation. Organisational Development is described by Hopkins (2006) as a practical way of
achieving change, however, in this instance it was the use of the HSE model for change will offered a structured approach. Without utilising such a model, I believe it would have led to a disjointed project, which would most likely have ended in failure. Grieves (2000) supports this with a note on organisational learning and using a devised plan for change. The HSE model was developed specifically for the Irish Healthcare system and as such provided the best framework for this project and by incorporating it, I was able to systematically implement my project.

I believe that through both thought and learned programmes, I developed an understanding of what it is actually like to implement a successful project before I commenced on this journey. This provided me with a vast sense of readiness to undertake the project.

5.3 Strengths of the project

The initial strength of the project was created by the fact that the key stakeholders and other members, actively participated in the project and that all staff became and remained engaged with the project. This was achieved through the initial planning stage when the cultural assessment took place. All involved had a positive attitude to the change and it was their willing participation which was one of the projects greatest strengths.

The transition from paper to electronic records is another strength of the project. Data analysis is an important factor for any business and importantly the service industry. The development of a hospital strategic plan is dependent on information on how the
The hospital has performed in the previous year. Symphony is a superb system for data collection in relation to patient experience times, which are increasingly become target driven. It can time stamp every step of the patients journey from registration to disposition. Prior to the introduction of the project these elements of data were not recorded. Following the record of a decision to admit a patient, the next record was the time they left ED. Now, with the introduction of the addition to the software, data will include, ward allocation and at what time the ward will be ready to accept the patient and the time the patient leaves. This addition to data collection will allow for a whole new field of analysis. This can be only be beneficial to the hospital as it continues on the journey to improved service delivery.

Finally, another strength worth noting is that of the project being lead and implemented by those directly involved in the process. Often work place improvements are driven by senior management and lack involvement form those at the point of service delivery. In this instance, I as project lead was seen by my colleagues as one of them and this allowed them to engage more freely, as opposed to a project being directed by the Executive Management Team.

5.4 Limitations to the Project

As the project had a direct effect on a small cohort of staff, the numbers involved in the data collection through the questionnaires was small. Although the recipients had a full and positive response, it is questionable if their responses where altered due to the cohesiveness of the working relationships within the group. Nevertheless, the
project was supported by the data, as the outcomes recoded were visible during the change process.

As the project was confined to the Emergency and Patient flow departments this provided an unforeseen limitation. As Symphony is not utilised or available to staff outside of these departments that fact that ward areas were not involved, places a limit on the effectiveness of placing patients to ward beds in the most efficient manner possible. I feel that if the ward areas had a visual of the situation with trolley waits and targets, it may improve ward efficiency, to allow for a more expedited process, which would allow our patients reach an appropriate destination as soon as possible.

5.5 Recommendations

The issue of patient flow is a burden on healthcare services throughout the world. With this local project we have seen how a local intervention can have a positive effect. Although this particular project was development to meet our own organisational need, it clearly justifies the suggestion that lean thinking should be utilised more and more within healthcare. The development of a lean thinking strategy within the hospital would create a system wide approach to lean thinking which could be hugely beneficial. This departmental project is having a positive effect on a local part of the service, however, as was discovered in chapter two, a system wide approach is far greater than small pockets of improvement at departmental level (Radnor, 2011).

There is a noted disconnect between the Patient Flow Department and the ward areas in so far as, once a ward bed is identified, the ward areas give an approximate time at
which the can receive a new admission. Operationally this is being streamlined with
the introduction of a member of the Patient Flow department taking on the role of a
Patient Placement Coordinator. Following the introduction of this project with the new
data that is now available, I believe this will lead to new era, were ward areas will have
to quantify as opposed to qualifying the reasons for the times allocated to receiving
new admissions. I recommend that this would be a worthwhile project, which if
implemented appropriately, would provide fairness and equity among our staff and
patients.

5.6 Summary

This thesis set out to provide a review of the organisational project which was
undertaken in the writers work environment. It outlined the aim and objectives of the
project and provided the reader with a concise description of how the paper continued.

The main themes included in the project were identified and systematically review
through the available literature. The theme of the paperless office was critiqued. which
revealed that in relation to healthcare, that a paper light approach is the way forward
and electronic records are beneficial for improved service access and patient care.
Lean thinking in healthcare was contended and we learned of its benefits in
healthcare, particularly if used in a system wide approach. The issues of patient flow
in healthcare were addressed. This looked at the topics surrounding variable demand
and capacity and we learned of improvement methodologies.
The implementation of the organisational project was discussed in relation to organisational development methodologies and the HSE model for change. A structured review of the initiation, planning, implementing and mainstreaming was delivered, which was rationalised through the available literature.

A comprehensive chapter on evaluation and its relevance in healthcare was provided. The evaluation of the project at different stages from the initial planning stage to the assessment of the outcome was presented, which provided evidence of a successfully implemented project.

To finalise the paper, the writer has presented an in-depth discussion on the impact of the project in relation to the organisation and people involved. The concept of reflection is used to help summarise the writers’ involvement in an organisational development project, which leads the reader to the recommendations for continued improvement with the acknowledged hospital.

5.7 Conclusion.

With the standardisation of emergency care through the National Emergency Medicine Programme, healthcare institutions are under increasing pressure to provide a safe and timely journey for their patients. As we strive to achieve these targets, we must remain cognisant of the need to continuously change and improve to meet the societal demand on healthcare.
HSE (2008) conclude that individual institutions must promote change across the system and with the continued development of healthcare staff through taught programmes such as the MSc in Healthcare Management, more and more institutions can reap the benefit.

The complex issue of patient flow and resource utilisation remain a challenge. From the change initiated through this development program, we can see how organisational change and efficiency can be achieved at different levels within an organisation. The use of the HSE model for change is a guiding factor to the success of this project. Having successfully implemented this, the writer considers the need for a change agent, in a role that would support staff with plans they have to improve the flow of healthcare.
References


Drennan, D. (1992). *Transforming company culture: Getting your company from where you are now to where you want to be*. London: McGRAW-HILL BOOK COMPANY.


http://doi.org/Article

Appendix 1

Change Model 3: John Kotter’s Change Model

1. Establish a sense of urgency
2. Create a coalition
3. Develop a clear vision
4. Share the vision
5. Empower people to clear obstacles
6. Anchor the change
7. Consolidate and keep moving
8. Secure short-term wins

Kotter's 8 Steps Model
Appendix 2

Physical Space

<table>
<thead>
<tr>
<th>Networked</th>
<th>Mercenary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office doors are open or unlocked; people move freely into and out of each other’s rooms. Offices may be decorated with pictures of family, postcards, cartoons, humorous, notes/pictures of colleagues. Large allocations of space are for social activity: bars, coffee lounges, sporting facilities, etc. “Privileged” space (larger offices; car paring) is linked to the formal hierarchy but there are also “deals” favouring some rather than others. There may be corporate logos but in negatively networked organizations these may be a source of amusement. Similarly, different territories within a building may be decorated and defended in ways that set them apart from others; the marketing department may become effectively a “no-go” zone for the finance people and vice versa. Outsiders are likely to be spotted - they will knock on doors before they enter; will be dressed differently, etc.</td>
<td>Space is allocated “functionally”- in ways that help to get the job done. Open-plan or flexible desk use is possible- but in order to assist with simple, efficient, and cost-effective methods of means of task achievement, not “chatting”. Uninvited visitors/people that drop by are likely to be shooed away if someone is busy. Little space is wasted in work areas, although entrances may be designed to underline fearsome reputation. Office decorations may be dominated by awards, recognitions of achievement, etc. Space allocation is linked to achievement and there are no favours in the car park; indeed, the priority may be the customer.</td>
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<table>
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<tr>
<th>Fragmented</th>
<th>Communal</th>
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<tbody>
<tr>
<td>Space is designed to help individuals work without interruption. Office doors are closed and offices are well equipped so that employees are effectively self-contained. Much of the time these offices may be empty (people are on the road; working from home; at a conference, etc.) but it is hard to tell if they are there or not. Some individuals may make their elusiveness a trademark (a common joke in this context: “What’s the difference between Jo and God? God is everywhere; Jo is everywhere but here!”). In the “virtual/fragmented” organization there is little corporate space - work is conducted from home, the car, etc.</td>
<td>Much space is shared either formally (open plan) or informally (lots of movement in and out of offices). It may sometimes be difficult to determine whose office you are in, and there are few barriers between departments or functions. There are unlikely to be big differences in space allocation between people. Formal social facilities are supported by extensive informal socializing; food and drink spread into “work” space. The corporate logo is everywhere; office decoration will improve around, extend, or adapt the language of the company values, mission, or credo.</td>
</tr>
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</table>
Part 1: The observational checklist: Communication

<table>
<thead>
<tr>
<th>Networked</th>
<th>Mercenary</th>
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<tbody>
<tr>
<td>There is a lot of talk. Although there are formal hierarchies and processes, much communication takes place around the formal systems in face-to-face conversations, on the phone, in “meetings before meetings.” Paper-based documents may be annotated by hand before being passed on to some others in the network. E-mail may be used to gossip. In highly politicized networked cultures papers may be copied routinely to key players. Skillfully managed, the networks span the business and assist integration, but often cliques and factions form around functions, levels, businesses, or countries, that impede communication. On the other hand, because there is a lot of talk, there is the possibility of rapid information exchange and increased creativity.</td>
<td>Communication is swift, direct and work-focused. Tense memos and data-laden reports leave little room for “idle” conversation. Conflicts are unlikely to be resolved by gentleman’s agreement; face-to-face confrontation or legalistic duelling (speak to my lawyer) are more common. Communication across boundaries (hierarchy, geography, etc) is expected and accepted if it is task-focused. Meetings are business like- well planned, and with a premium on actionable outcomes. The expression of personal problems is discouraged.</td>
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<th>Fragmented</th>
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<tbody>
<tr>
<td>Talk is limited to brief one-to-one exchanges in the corridor or on the phone. Meetings are resisted (what’s the point?, difficult to arrange, hard to manage for any length of time without boredom, acrimony, or people simply walking out). Individuals will talk only to those who are “worth” talking to (to get rid of a problem; to pick their brains; to ask for resources); otherwise the deal is “I leave you alone if you leave me alone.” Key individuals may be difficult to find, even within your own department. Documents replace talk but there is no guarantee that they will be read. Much communication is directed outside the organization- to clients and professional peers.</td>
<td>There is communication in every channel, but oral, face-to-face methods are likely to dominate. Nonverbal communication is, nevertheless, important; dress, color, and symbolism may all help individuals to feel close to others. Communication flows easily inside between levels, departments, and across national cultures (the cult encompasses all), but outsiders may feel excluded. Talk is littered with the private company language reaffirming the bonds between “us” and the differences from “them.” It is difficult not to talk, and there are few secrets-private or professional. Guilt and shame are used to correct “closed” behaviour.</td>
</tr>
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Your Organisation or Department

Part 1: The observational checklist

<table>
<thead>
<tr>
<th>Time</th>
<th>Time</th>
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<tbody>
<tr>
<td><strong>Networked</strong></td>
<td><strong>Mercenary</strong></td>
</tr>
<tr>
<td>People use work time to socialize- and they are not penalized for doing so. To some extent, the reverse applies-“All work and no play makes Jack a dull boy.” In addition, social activities are often extensions to the working day. This may make the “working day” long but some part of it may be in the bar, on the golf course, or at the social club. People get to know each other quickly, and many have known each other for a long time.</td>
<td>Long hours are the norm, although it is acceptable to leave once the job is done. This is clearly signalled, since time and performance measures are explicit. Private time is precious and, where possible, protected (it is what’s left if you don’t cut it at work). It takes a long time to know people other than in their work roles, “idle chat” is regarded as a waste of time.</td>
</tr>
<tr>
<td><strong>Fragmented</strong></td>
<td><strong>Communal</strong></td>
</tr>
<tr>
<td>People go to the office only when they need to; absence is the norm. Achievement, not time, is the measure (and the achievements may take a long time to deliver). Most time is devoted to the pursuit of individual professional and technical excellence; anything that interferes with this-colleagues, administrative chores, even clients/customers-can be considered a waste of time. It is possible for individuals to work “together” for many years without knowing each other( a common gaffe is for colleagues to reveal their ignorance of each other in front of clients at, admittedly rare, social events). Careful time management is key skill- often involving complex schedule control.</td>
<td>People live at work; professional life is so engaging that “conventional” time is ignored. Work and non-work life dissolve into one; even when at home work can be a preoccupation. Close working relationships may be reflected in friendship groups, marriage, affairs, etc. Work becomes a way of life; social activity that is disconnected from professional interests may be regarded as a waste of time (work is relaxation and vice versa).</td>
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## Part 1: The observational checklist Identity

<table>
<thead>
<tr>
<th>Identity</th>
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<tbody>
<tr>
<td><strong>Networked</strong></td>
<td>People identify with each other; close ties of sociability heighten feelings of similarity as individuals. Differences are understated and if expressed at all they are seen in subtle variations of dress, code or speech patterns. Excessive displays of personal differences are resisted, and some store is set in long established social rituals that tie people in even after they have left (social clubs, pensioners associations, and alumni associations). Personal loyalties persist; although in some contexts the company may be criticized, this is often manifested in dark humour - because it’s little like criticizing yourself.</td>
</tr>
<tr>
<td><strong>Mercenary</strong></td>
<td>People identify with winning. Although norms of behaviour emerge here as anywhere, differences between individuals are acceptable and encouraged if they assist in achieving the result. What draws people together are shared experiences, goals, and interests rather than shared sentiments or feelings. Ultimately, attachments are instrumental - the enemy may eventually be the next employer if it suit personal interests. There is no shame in shifting allegiance or ruthlessly exploiting knowledge of business weaknesses once employees move on.</td>
</tr>
<tr>
<td><strong>Fragmented</strong></td>
<td>People identify with values of individualism and freedom; with personal technical excellence; with organizations that minimize interference. There are significant personal differences between individuals, but these are unlikely to impede achievement (there are low levels of interdependence), and they confirm values of freedom. Allegiance will be professional rather than organisational. Private lives are often a mystery; frequently a strong compensation for the loneliness of working in the fragmented.</td>
</tr>
<tr>
<td><strong>Communal</strong></td>
<td>People identify with the values and mission of their company. The credo is lived; the words are played out, enacted, debated, applied and developed. Work becomes a way of life. Logos, symbols, war cries abound. Excessive identification (combined with a track record of success) can lead to a loss of perspective, intolerance of criticism, and complacency. The company attracts fierce loyalty. When individuals leave they continue to be supporters. Indeed, their fervent identification can be disabling in their subsequent careers. Work identity is carried over into private life - logos on clothes, trying out company products at home, visiting company stores on weekends, etc.</td>
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</table>
Part 2: The Corporate Character Questionnaire (Goffee and Jones 1998)

Indicate how strongly you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The group I am assessing (your organisation) knows its business objectives clearly</td>
<td>1</td>
<td>2</td>
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<td>2. People genuinely like one another.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>3. People follow clear guidelines and instructions about work.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>4. People get along very well and disputes are rare.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>5. Poor performance is dealt with quickly and firmly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. People often socialize outside of work</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>Statement</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neither agree nor disagree</td>
<td>Agree</td>
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<tr>
<td>7. The group really wants to win.</td>
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<tr>
<td>8. People do favours for each other because they like one another.</td>
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<td>2</td>
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<td>5</td>
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<tr>
<td>9. When opportunities for competitive advantage arise people move decisively to capitalize on them</td>
<td>1</td>
<td>2</td>
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<tr>
<td>10. People make friends for the sake of friendship- there is no other agenda</td>
<td>1</td>
<td>2</td>
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<tr>
<td>11. Strategic goals are shared.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>12. People often confide in one another about personal matters.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. People build close long-term relationships- someday they may be of benefit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>14. Reward and punishment are clear</td>
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<tr>
<td>15. People know a lot about each other's families</td>
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<td>2</td>
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<tr>
<td>16. The group is determined to beat clearly defined enemies.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>17. People are always encouraged to work things out flexibly as they go along.</td>
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<td>2</td>
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<td>5</td>
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<tr>
<td>18. Hitting targets is the single most important thing.</td>
<td>1</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. To get something done you can work around the system</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Projects that are started are completed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. When people leave, co-workers stay in contact to see how they are doing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. It is clear when one person's job ends and another person's begin.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. People protect each other.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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</table>
Assessing your Organization’s Culture

Scoring Key for Questionnaire

Sociability

<table>
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<tr>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
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Solidarity

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<tr>
<th>1</th>
<th>3</th>
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14 | 16 | 18 | 20 | 22 | 23 |
Part 3: Is Your Culture Positive or Negative? (Goffee and Jones 1998)

Answering the following questions for the quadrant identified in part 2 will ascertain whether your organisation displays mainly positive or negative feature. Indicate how strongly you agree or disagree with the following statements.

Example below pertains to Mercenary

<table>
<thead>
<tr>
<th>Mercenary</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The performance system drives people to undermine each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. People care about their own individual targets and goals first, and the overall organizational performance second.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. People spend too much time finding out how much the competition would pay them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>4. Criteria for success and failure are clear, agreed upon, and publicized.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>5. Different parts of the organization are so focused on their own targets that they miss business opportunities that require cooperation.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Priorities are determined quickly and followed decisively.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tr>
</tbody>
</table>
High scores on 1, 3, and 5 suggest your culture is negative.

High scores on 2, 4, and 6 suggest your culture is positive.

Part 3: Is Your Culture Positive or Negative? (Goffe and Jones 1998)

Answering the following questions for the quadrant identified in part 2 will ascertain whether your department displays mainly positive or negative feature. Indicate how strongly you agree or disagree with the following statements.

Example below pertains to Fragmented

<table>
<thead>
<tr>
<th>Fragmented</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individuals are left alone to produce their best work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. People hardly see each other as colleagues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Organisational success is largely the sum of individual successes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>4. People avoid tasks and activities that would benefit the organization as a whole.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. There are few rules or meetings that get in the way of work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. People try to avoid each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

High scores on 2, 4, and 6 suggest your Fragmented culture is positive.

High scores on 1, 3, and 5 suggest your Fragmented culture is negative.
Part 4: Critical Incident Analysis (Goffee and Jones 1998)

Having identified the culture of your organisation and its negative or positive tilt, the fourth test which follows will offer one more way to make this assessment. Goffee and Jones (1998) have often found that a vital clue about cultural type can come from reactions to critical incidents. You can tell a lot about culture by the way organizations handle success, failure, innovation, and change. Large or difficult decisions have the same revealing effect. Therefore, pick the quadrant (e.g. Mercenary), read the following scenarios, and mark how people in your organisation would likely react. The choices may strike you as extreme, but pick the one most similar to your organisation’s culture.
Appendix 4

Process Map of Current Practice

1. **Patient admitted by Specialist**
2. **Nurse Manager updates hand written bed list**
3. **Nurse Manager updates Symphony**
4. **Nurse notifies clerical staff**
5. **Clerical staff update their hand written list**
6. **Bed identified**
7. **Clerical staff inform Bed Manager**
8. **Bed Manager informs Clerical**
9. **Clerical Officer updates list**
10. **Nurse Manager updates list**
11. **Patient dispatched to ward**
12. **Patient discharged from Symphony**
13. **Patient dispatched to ward**
Appendix 5

Process Map of Practice Following the Removal of Waste

1. **Patient admitted by Specialist**
2. **Symphony updated by Nurse Manager**
3. **Bed identified**
4. **Patient dispatched to ward**
5. **Patient discharged from Symphony**
Appendix 6

Evaluation of Staff Attitudes Post Implementation of Change Initiative

- **Has the new process improved efficiency?**
  - Yes: 100%
  - No: 0%
  - Unsure: 0%

- **Should the new process be formalised?**
  - Yes: 100%
  - No: 0%
  - Unsure: 0%

- **Do you think the change has improved patient flow?**
  - Yes: 80%
  - No: 20%
  - Unsure: 0%

- **Has the change had a positive effect on your workload?**
  - Yes: 80%
  - No: 20%
  - Unsure: 0%
Appendix 7

BM Screen = Bed Management Screen update to Symphony

<table>
<thead>
<tr>
<th></th>
<th>Pre BM Screens</th>
<th>Post BM Screens</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Ward Transfer Time (Hrs/Mins)</strong></td>
<td>16.06</td>
<td>12.14</td>
</tr>
<tr>
<td><strong>Median Ward Transfer Times (Hrs/Mins)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre BM Screens</td>
<td>13.42</td>
<td></td>
</tr>
<tr>
<td>Post BM Screens</td>
<td>10.53</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 8

UTILISING AVAILABLE TECHNOLOGY TO REDUCE WASTE AND DECREASE PATIENT EXPERIENCE TIMES.

Keith Barter
MSc. Healthcare Management
RCSI Institute of Leadership

Introduction & Background

Societal demand on Healthcare is increasing. Continuous improvement is required to meet this increase in demand1. Emergency Department (ED) overcrowding is a National problem and operational process review can identify areas for improvement2. A review of the organisation of the transfer of patients from ED to inpatient areas was undertaken to increase departmental efficiencies and reduce patient experience times.

Aims & Objectives

AIM
To streamline the process of organising emergency admissions into the Hospital by reducing waste and utilising available technology to improve patient flows.

OBJECTIVES
- Develop a working group of key stakeholders.
- Patient Management software (Symphony) update by ICT Consultant: to enable the recording of in-house destination for patients.
- Develop a process map of current practice and measure manpower time and repetition to identify non-value added steps.
- Staff training for Bed Management Department for the move from paper to electronic records.
- Trial new process for two weeks and evaluate new process through mapping and measuring patient experience times.
- Implement new process to achieve ongoing operational efficiencies.

Methodology

The HSE change Model was identified for use as it is a structured format which maintains focus and momentum for a change initiative3.

Figure 1: HSE Change Model 2

INITIATION
Identify the need for change
What are drivers and resistors
Cultural Analysis
Stakeholder and SWOT analysis

PLANNING
Develop a working group of key stakeholders
Use SMART Objectives to formalise the plan and build commitment

IMPLEMENTATION
Information workshops for different disciplines involved.
Email plan to all involved with regular updates

Figure 2: Symphony update

MAINSTREAMING
Trial period with daily feedback sessions to maintain momentum.
Address issues and monitor with continuous feedback.
Project lead to maintain project going forward

Evaluation

Evaluation of staff attitudes towards improvement following the introduction of the project

Figure 3: Staff Attitudes

Patient experience times were measured from the time of admission to the time to the ward and were evaluated.

Figure 4: Average Ward Transfer Time (Hrs/Mins)

Organisational Impact

Shorter stay in ED for admitted patients.
More accurate data based on electronic records versus paper
Reduced workload for staff.

Conclusion

Effective implementation of a project through a structured format, resulting in improved operational efficiency and decreased patient experience times in the ED from the time a decision is made to admit, it is made to admit a patient.

References