

Commissioning a Short Stay Observation Unit (SSOU) in a children's facility within a Dublin Academic Teaching Hospital.

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MSc in Leadership and Management Development 2012-2014.

Change Project Dissertation:

Commissioning a Short Stay Observation Unit (SSOU) in a children's facility
within a Dublin Academic Teaching Hospital.

A dissertation submitted in part fulfilment of the MSc in Leadership and Management
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Abstract

This change project involves the commissioning of a Short Stay Observation Unit (SSOU) within a DATH's Hospital.

SSOU's deliver intensive short-term assessment, observation or therapy to selected ED patients to optimize early treatment and discharge. Observation medicine in dedicated units is a feature of many adult Emergency Departments (ED) but this has not been reflected in children's ED's in Ireland.

The current literature supports the development of SSOU's, indeed it is very much in line with the new National Model of Care for Paediatrics in Ireland and the new National Children's Hospital.

Developing a unit can be challenging and there is much to be considered when selecting the governance structure, choosing suitable conditions, staffing and developing metrics to help monitor its performance post opening. The creation of this new unit required a cultural change with regard to how care is delivered within the hospital. This required a change to the "day to day" practices of the consultants and nurses. Such changes can be difficult in large, complex healthcare organizations. However, the underlying assumption of this project is that the patient comes first and that SSOU's are designed to prioritise the patient and not staff, management or finances.

The rationale for the change is to streamline ED services by transferring observational patients from ED to the SSOU thus reducing ED waiting times and inpatient admissions. The HSE Model of Change (2008) was used to guide and manage the change process. The project was evaluated against the project objectives, a nursing survey (n=55) and nurse management focus group (n=5) was also used to evaluate the success of the project. The results indicate that although staff have some concerns with regard to the development 71% (n=39) would be interested in redeploying to the unit upon its opening.

The study also identified a potential saving of 6-7 inpatient beds per day with an operational SSOU. SSOU's have been shown to reduce hospital length of stay and costs while increasing parental satisfaction.

Finally, the author discussed the findings of the project in light of the current literature and from the experience of undertaking the project. The strengths and limitations are identified and recommendations for the organisations are documented.

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Chapter 1:Introduction

1.1 **Introduction**

The change project involves the commissioning of an Observation Unit (OU) within a Dublin Academic Teaching Hospital (DATH). A literature review identified four key benefits for the establishment of such a unit. With the aid of the Health Service Executive (HSE) Change Model (2008) the change process is described in detail. The change project will then be evaluated against the objectives as set out in this chapter. Finally the discussion chapter will review findings from the project as it relates to the literature and the authors experience and make recommendations for future improvements.

1.2 **Rationale for carrying out this project.**

The organisation in which this change is taking place is a Dublin Based co-located hospital. The organisation is responding to changes in the way care is to be delivered to the children of Ireland. The Minister of Health has directed that the three Dublin children's hospital create and develop an observation unit. The aim is to reduce waiting times in Emergency Departments (ED) and to ensure no child has to remain on an ED trolley overnight waiting for admission.

Observation medicine in dedicated units has been a feature of many adult ED's since the 1960's (Mace, 2001) but this has not be reflected in children's ED's in Ireland. It is acknowledged that observational medicine occurs in our children's ED however, it may be to the detriment of efficient streamlined care in those ED's. Children receiving prolonged care

in our ED's may result in cubicles being blocked resulting in reduced patient turnover and prolonged ED times (Levett, Berry, & Wacogne, 2006).

OU's provide alternative service options for patients who would otherwise have been treated in traditional inpatient beds or in the ED (Ogilvie, 2005; Victorian, 2009). Observation medicine units deliver intensive short-term assessment, observation or therapy to selected ED patients to optimise early treatment and discharge. Therefore resulting in reduced length of hospital stay (LOS), hospital costs and increase parental satisfaction (Daly, Campbell, & Cameron, 2003).

OU's are very much in line with the proposed National Model of Care for Paediatric Healthcare in Ireland (NPHDB, 2010), the New National Children's Hospital (St. James's) and its two satellite units (CHGB, 2014). All three sites will have a purpose built OU attached to their ED's. Therefore, the change represents not only a change in our hospital but the way care will be delivered in the future.

1.3 Aims and Objectives

Aim: To commission a Short Stay Observation Unit in a children's facility within a DATH's Hospital.

Objectives:

- Establish a SSOU Operations Committee by October 2013 to assist in meeting the aim and objectives of this project. Terms of reference for this committee to be written and ratified by 12th November 2013.

- Develop, agree and implement a governance structure for the SSOU by December 2013. The governance structure will be available to a 100% of staff for review by the 1st of January 2014.
- Identify and secure financial approval for the equipment required for the SSOU.
- Identify staffing level requirements through workforce planning (nursing, medical and non-clinical), negotiate agreement for redeployment of nursing staff and present a business case for additional staff as required.
- Communicate clearly with all staff throughout all stages of development with regard to the SSOU. Identify concerns (real or imagined) with regard to this development and alleviate same as much as possible. By the 1st of December 2012, a selected communication system to inform staff about development will be in place.
- To agree the medical conditions suitable for treatment in the SSOU.

1.4 My role as a change agent.

I have a nursing manager background but have moved into a business manager's role. As business manager, with a clinical expertise, and not directly involved in the running of ED or the wards I was asked to lead this project. With financial implications with regard to this project it was also seemed appropriate that the business manager take the lead with regard to this initiative.

The hospital gave consent to use the commissioning of the SSOU as the change project. The Clinical audit manager was informed and the project was deemed not to require hospital ethical approval. The Data Protection Code of Practice for Hospital staff was adhered to. No staff or patient details were recorded. Staff were informed that the survey would be used for

the thesis therefore forms completed by staff were deemed to have given consent for publication purposes.

1.5 Conclusion

Health care initiatives are taking place across the across the health service in Ireland. A key focus is proving quality care that is patient focused while providing value for money and meeting governmental targets (Som, 2009). This dilemma facing hospitals of providing quality care with reduced finances suggest that we should look at viable alternatives to the way we are currently providing care. Waiting times in ED are a prime focus of the SDU with its twice-daily Compstat figures the media (DOHC, 2014;SDU, 2013). Compstat is an accountability framework based on the three pillars of Quality, Access and Resources. At its core are Trolley counts (TrolleyGar) and the Patient Experience Time (waiting time from registration to departure from ED) (SDU, 2013). OU's are reported to assist in reducing ED waiting times as well as reducing hospital costs, length of stay and increase parental satisfaction with regard to the care the child receives in the ED and hospital. OU's are part of the model of care envisage by the new Children's Hospital and therefore are significant to all those presently working in these hospitals.

Chapter 2: Literature Review

2.1 Introduction

Observation medicine developed in the United States in the 1960's as a branch of emergency medicine with a focus on chest pain (Mace, 2001). During that period, within the United Kingdom, the need for observation beds was also recognised although the focus was surgical and orthopaedic admissions (Cooke, Higgins, & Kidd, 2003).

Since then both government and professional bodies have supported OU development:

Table 1. OU Support

Governmental/Professional Body	Recommendations
British Association of Accident and Emergency Medicine (BAEM) (1989).	All ED's should have one short stay bed for every 5,000 attendees.
National Framework for Emergency Care in Ireland (HSE, 2012).	Clinical Decision Unit (CDU) for all Type A (24/7) ED's
College of Emergency Medicine (CEM) (2008).	All UK and Ireland ED's should have a CDU or OU.
Comhairle na nOspidéal (2004)	All acute general hospitals that receive acutely ill medical patients should develop an Acute Medical Unit (AMU).
Royal College of Paediatrics and Child Health (2012).	Reconfigure and reduce paediatric inpatient services due to consultant workforce issues. Development of observation units that can assist in decision-making, avoid unnecessary transfers and improve the provision of safe emergency services for children.
American College of Emergency Physicians (ACEP) (2011).	Dedicated ED observation units is "better practice" over observing the patient on a ward or ED.

Furthermore governmental funding, within the UK, encourages the development of assessment wards for the management of emergency admissions (Cooke et al., 2003). Recent

public and private policy trends, within the US, support observational care directed at reducing inpatient admissions (Venkatesh, Geisler, Chambers, Baugh, Bohan., and Schuur, 2011).

Despite these recommendations, within Ireland, none of the three children's hospitals has a dedicated OU and within the US, only 34.1% of all ED's have a dedicated OU (Venkatesh et al., 2011).

2.2Method/Data Sources

A computerised search of healthcare databases was undertaken using Medline, Cinahl, Wiley and Emerald. The related topics facility on Pubmed was also used. The literature was searched using key words "observation unit", "short stay units" combined with "paediatrics" and "children". Searches were limited to material published in the English language from 1999. A systematic review of 51 articles were reviewed.

2.3Characteristics of Short Stay Observation Units.

Observation Units have various names based on specific patient focus or local preferences making comparisons difficult (ACEP, 2011). What they all have in common is a proximity to ED with the sole purpose to improve *" t h e q u a l i t y o f m e d i c a l c o b s e r v a t i o n a n d t r e a t m e n t w h i l e r e d u c i n g i n "* (Daly, S., Campbell, D and Cameron, P., 2003, page 559). The distinction between patients

for observation, admission, transfer or discharge home is not always clear in the literature further complicating comparisons.

Traditionally, children requiring observation are admitted onto wards to ensure ED governmental targets are met (Levett *et al.*, 2006). This model of care can result in discharge delays, reduced patient turnover and longer periods of stay due to traditional daily consultant ward rounds (RCPCH, 2009). Baugh, Venkatesh and Bohan (2011) suggest that 5-10% of those attending ED are suitable for OU care. Therefore, observational medicine is suggested as an alternative to inpatient care with the potential to streamline appropriate health care delivery (Daly et al., 2003).

Supporters of OU's claim that they increase patient/parental satisfaction, reduce hospital costs, inappropriate admissions and discharges for certain medical conditions.

The aim of this review is to analysis these claims and to determine to what extent they can affect the quality of the services provided.

2.4 Review Themes

2.4.1 Governance

Clinical governance is defined as

*“ a s y s t e m b y w h i c h t h e g o v e r n i n g b o d y , m a
and are held accountable for patient care, minimising risks to consumers and for
continuously monitoring and improving the quality of clin i c a l (Balding, 2005.
Page 354).*

The governance model of observation units depend greatly on local circumstances, for example the presence of inpatient wards, community supports, ED structure and the presence of paediatricians (RCPCH, 2009). In general, there are three types of governance structures in use within these units: Emergency Consultant, Paediatric Consultants or a shared approach (Appendix 1). In the U.S. 36% of ED's reported having an OU, of which 56% were governed by ED physicians (Wiler, Ross and Ginde, 2011). In Australia generally the medical responsibility for children managed under observational medicine lies with appropriate clinical speciality, i.e. paediatricians although emergency medicine can also play a role (Victorian, 2009). While two of the main professional bodies in the UK support units co located in ED governed by emergency and paediatric consultants (CEM, 2008; RCPCH, 2012). While the literature might be divided as to how OU's should be managed, the literature suggests that strong management and leadership are important for a successful observation unit (ACEP, 2011; Cooke *et al.*, 2002; Napolitano and Saini, 2014). Rowling (2011) states that "*Effective leadership for improvement requires engaging doctors to participate in redesign efforts and to build supports for these activities among their colleagues*" (page 14).

The literature suggests that the administration and clinical responsibility of observation units can differ depending on the health service and model of care. However, it is also clear that a leadership structure is in place. Napolitano and Saini (2014) state that a shared leadership approach between emergency and hospital medicine could lead to unique opportunities for enhanced communication and joint leading with obvious benefits for the patient.

2.4.2 Patient, Parent and Staff Satisfaction.

Previous reviews have identified increased patient satisfaction with regard to observation care versus inpatient admissions (Baugh *et al.*, 2011; Ogilvie, 2005). Baugh *et al.* (2011) warn that as the national focus on health care quality is based on patient centred metrics therefore influencing future governmental payments. Whether parental satisfaction is subjective or objective, “opinion” or “fact” it has become a major consideration for healthcare workers (Goldbloom, 2005). Therefore initiatives, like OU’s, which improve patient/parental satisfaction should be encouraged. (Baugh and Bohan, 2008).

Cooke *et al.*, (2003) found patient satisfaction to have increased with the presence of an OU. They suggest that patients suffered fewer problems, had increased access to diagnostic investigation, underwent fewer investigations, were cared for in less crowded comfortable conditions by senior physicians. Thus leading to increased patient satisfaction scores. This is supported by Moseley, Caterino, Cooper, Hawley, Inama and Rund (2012) who observed an 18% increase in patient satisfaction following the opening of their unit with a “noticeable increase in positive comments in verbatim from patients” (page 5)

Hopper, Archer, Breene, Bolt, & Sammartino, (2008) conducted a telephone survey of 388 of 756 admissions to assess patient satisfaction. They demonstrated overwhelmingly positive results for their unit with 97% stating a satisfaction rating of good, very good or excellent.

Blair, Gore, Isaza, Mahotra, Islam and Lachman (2008) distributed a parental satisfaction questionnaire to 148 of 455 parents attending their new paediatric care unit, with a return rate of 70% (104). 94% were more satisfied with the unit compared to the traditional ED setting. However, no survey was undertaken during busy times. The ED sample was small (42), conducted at night when the unit was closed and when there were no paediatric nurses working. The staff interviewed found the ED overwhelmingly superior however the sample

was small (10) and only staff from the unit were interviewed. Despite these limitations, the high parental satisfaction rating is worth consideration.

Silvestri and McDaniel-Yakscoe (2005) conducted a retrospective study of the role of the nurse practitioner in a paediatric ED care unit. They concluded that the new extended nurse role in the unit increased both staff and patient satisfaction of the service. However, no data was provided to justify how they reached this conclusion.

Rentz, Kadish and Nelson (2004) conducted a survey of 198 referring physicians identifying a median satisfaction rating of four (most satisfied) with regard to parental and referring physician satisfaction. The parental scores were based on the physician's beliefs of what the parents would have scored if they were asked. Therefore, the results were heavily biased with regard to how the referring physicians felt about the service themselves. Despite the limitations it clearly identifies physician support for the service. ACEP's (2011) similarly identified that physician satisfaction with regard to OU's was high.

The findings suggest that OU's improve patient/parental and staff satisfaction. However they are generally implemented alongside advances in new medical treatments and clinical protocols (Moseley et al., 2012). Therefore, improvements with regard to patient satisfaction may not be the result of the OU alone. It may be impossible to distinguish between the benefits of each and therefore the findings should be interpreted cautiously. (Konnyu, Kwok, Skidmore, & Moher, 2012).

Ogilvie (2005) states that parent satisfaction with alternatives to traditional care have been consistently high. He warns, however, that any type of service reorganisation should not disadvantage the child or family particularly where inpatient services are withdrawn.

2.4.3 Financial Implications.

Research suggests that OU's are more economical than standard care (Hassan, 2003) and are a better match of resources with patient care needs, providing equivalent care in a less costly setting (Wiley, 2001). Reduced cost associated with reduced Length of Stay (LOS) is often quoted as a factor for OU development however few undertook any financial analysis of their own.

Despite the US being the birthplace of observation medicine the complex structuring of the financial reimbursement has played a key part in the reluctance of some hospitals to develop an OU (CEHSEU, 2004; Mace, Graff, Mikhail, and Ross, 2003; Macy, Kim, Sasson, Lozon and Davis, 2010; Wiley, 2001).

However, recent policy changes may pave the way for their future development:

1. In 2006, the Centre for Medicare and Medicaid Services (CMS) initiated the Recovery Audit Contractor (RAC) to process retrospectively any “*p o t e n t i a l w a*” and “*o v e r p a y m e n t s*” in particular regarding short stay care that occurred in inappropriate settings (Venkatesh et al., 2011). Within three years, they successfully recovered \$1.3 billion in previously distributed payments (Wiler *et al.*, 2011). Baugh & Bohan, (2008) identified that inpatient admissions were more likely to be audited compared to OU patients.
2. In 2007, the CMS expanded reimbursement for observation status from three conditions to any clinical condition.
3. A review by the CMS of patient costs versus hospital charges may result in more patients being cost effectively managed in observation units in the future (Baugh & Bohan, 2008).

A fourfold increase in OU's since 2005 has been attributed in part to these major policy changes and from private insurers following suit. (Venkatesh et al., 2011).

Baugh *et al.* (2011) found that OU improved the fiscal performance for both the ED and the hospital. They identified cost savings ranging from \$151 to \$1197. They concluded that these units could provide high quality medical care at lower costs without sacrificing any aspects of care such as patient satisfaction. However, they warn that admissions from these units (20%) run the risk of incurring additional costs without the additional revenue. They suggest that staff costs may be reduced due to the lower acuity of the patients being cared for therefore nurses and physicians can more manage more patients than inpatient areas.

OU's have historically been designed around adult patients and therefore the standards around billing tends to reflect this (Fieldston, Shah, Hall, Hain, Alpern, Del Beccaro and Macey, 2013). Four of twenty-five diagnoses were examined in detail with regard to a cost analysis. They stated that observation stays for these conditions resulted in \$260 less in costs; however, large overlaps in costs were demonstrated in both groups. They observed that “*high intensity medical service of brief duration, leading to a quick clinical resolution, may receive lower reimbursement payments*” (Fieldston et al., 2013. Page 1055) which could have cost implications for hospital finances. However, room costs for the observation patient was significantly lower but substantial overlapping costs between both groups occurred. Additional costs run the risk of being passed onto the families as observation status may be defined as an outpatient service and therefore not covered by public and private insurers.

CEHSEU (2004) similarly identified that OU patients accrue more costs in their first few days. This “front loading” phenomenon, they suggest, is due to the use of resources for rapid assessment and management, which is greater in the first 24 hours. However, they identified

a reduced LOS and inferred this “front loading” represents a redistribution of costs rather than an increase.

Goodacre, Nicholl, Dixon, Cross, Angelini and Arnold (2004) randomised control study of 972 adults with chest pain only observed a cost saving of £78.00. These modest savings, they realised, was due to the higher initial costs incurred through a rigorous diagnosis workup. They believe that these costs savings were secondary compared to the greater reassurance given to the patient.

Najaf-Zadeh, Hue, Bonnel-Mortuaire, Dubos, Pruvost and Martinot (2011) however identified the overall utilisation of resources (i.e. diagnostics, treatment and monitoring) were significantly lower in OU patients unfortunately they did not attribute a figure to these savings.

Cooke *et al.* (2003) also identified that cost effectiveness is LOS related. They warn that studies of this nature should be interpreted with caution. They suggest that these studies are generally not cost effectiveness studies in themselves but studies with regard to LOS in which shorter stays are interpreted as cost savings. This they suggest may not always be the case.

Hostetler *et al.* (2002) undertook a retrospective study over 4 years of 5714 patients following the opening of their OU (adult and children). They concluded that the unit reduced costs by decreasing unnecessary admissions. They identified that 4192 were treated in the OU who would have been previously treated as inpatients. They inferred savings of up to 50% but undertook no cost savings analysis themselves. They also attributed a cost saving to minimising the liability to the hospital and physician that the observation status provides by improving difficult diagnosis and reducing inappropriate discharges.

Hopper *et al.* (2008) indicated savings with regard to the reduction of transfers out from their hospital. Prior to their OU 700 (approximately) were transferred annually to other hospitals for inpatient care with all its attendant costs, risks, reduced continuity of care and family disruption. Only 239 transfers occurred following the opening of the OU, although the finding suggest cost savings unfortunately they did not undertake a cost savings analysis.

Macy (2002) states that assertions that OU's providing a cost effective alternative to inpatient care should be balanced with the possibility that OU might extend the care of patients who would have otherwise been discharged home. The OU system may also be open to potential abuse by admitting patients who do not require observation to boost revenue and reduce audit pressures (Greenberg *et al.*, 2006; Ross, 2010). However, although these statements seem anecdotal in nature the RAC initiative would suggest that the US is taking these claims seriously.

Two studies identified the seasonal variance within paediatrics and identified that it can be difficult to identify the appropriate staffing levels and questioned the value keeping such units open especially in "off peak" seasons (Crocetti, Barone, Amin, & Walker, 2004; Najaf Zadeh *et al.*, 2011).

The literature would support the suggestion that OU's have the potential to reduce hospital costs. These cost saving are mainly related to LOS, freeing up inpatient beds and within the US reducing the risk of a RAC audit.

2.4.4 Admission Rates from SSOU.

The RCPCH (2009) identified an 18% increase in paediatric emergency admissions in the past decade however, despite this the average LOS has fallen with many staying less the 24

hours. Gill, Goldacre, Mant, Heneghan, Thomson, Seagroatt and Harden (2013) identified a 28% increase in the admission rate for children with a two-fold increase in admissions of less than a day. Coon *et al.* (2012) identified a 6.8% increase over the past 3 years while identifying an average LOS of only 1.5 days.

Many studies have identified reasons for this increase in admissions:

Table 2.

Reasons for increased admissions.
<ul style="list-style-type: none"> Ø Demand from parents with regard to diagnosis, treatment and management, Ø Risk of legal claims from inappropriate discharges, Ø Parental lack of experience in dealing with childhood illnesses, Ø Lack of experience of junior doctors thus increasing admissions, Ø Pressure on ED to meet waiting time targets therefore increasing the likelihood of admission, Ø Funding initiatives to classify attendees as admissions and Ø Reduced social, family and “out of hour” supports and services. <p>(Blair et al., 2008; Coon et al., 2012; Gill et al., 2013; Hassan, 2003; RCPCH, 2009; Saxena, Bottle, Gilbert, & Sharland, 2009).</p>

Gill *et al.* (2013) identified that the rise in admissions correlate also with the rise in OU’s. The adoption of care pathways may discourage formal assessment and treatment until admission. Ogilvie (2005) states that the assumption that all patients that who are admitted to an OU would have otherwise been admitted is questionable. Indeed, by developing such units may have altered the threshold for referrals. He identified a 13-19% inpatient admission rate from such units.

Observation Units, with an admission rate of 30%, can act as a “Safety net” for ED preventing inappropriate admissions and discharges (ACEP, 2011). OU’s often described as

“admission gate keepers” who protect vital medical beds and suggest an admission rate of 20% (Hassan, 2003; Rentz et al., 2004). However, Macy *et al.* (2010) state that OU’s should question the validity of their unit’s acceptance guidelines if the admission rate is greater than 30% or indeed if rates are very low. Abenhaim, Kahn, Raffoul, & Becker (2000). suggest selecting patients for OU’s, who are less ill, as it can lead to increased efficiencies by allowing teams to develop expertise in dealing with a narrow range of conditions.

Of the 23 studies that reported admission rates 7 identified admission rates of 20% (Abenhaim et al., 2000; Alpern et al., 2008; Baugh & Bohan, 2008; Baugh et al., 2011; Mallory et al., 2006; Scribano, James F Wiley, & Platt, 2001; Wiler et al., 2011).

Certain medical conditions in particular seem to be more suitable to treatment within an OU resulting in a much lower admission rate than 20%. Greenberg *et al.* (2006) identified only an 8% admission rate of the 170 children with croup. Calello *et al.* (2009) identified an admission rate of only 5.4% with an average length of stay of 15 hours for children with accidental poisoning in. Scribano *et al.* (2001) similarly identified a 4% admission rate for children with accidental poisoning. While Holsti *et al.* (2005) retrospective study, over two years, of closed head injuries in children identified a 5% admission rate and an average LOS of 13 hours.

Zebrack *et al.* (2005) of the 4189 children admitted to this Hybrid Unit from ED they identified that 85% of children were discharged home within 24 hours.

Mahajan, Arora, Kaur, Gupta, & Guglani (2013) identified an overall admission rate of only 9% with an average length of stay of 13 hours from their OU. However, of the 300 that presented in ED 173 (58%) were treated in the OU. Baugh *et al.* (2011) suggest only 5-10% of ED patients are suitable for the OU therefore one would have to question their admission criteria and therefore the results published.

Hopper *et al.* (2008) stated that 700 children (approximately) were transferred annually to other hospitals for inpatient care with all its attendant costs, risks and family disruption prior to their unit opening. Following which only 242 children required transfer with 859 (78%) children being cared for in the OU. The extremely high for admission to an OU from ED reflects the alternative which is an inter hospital transfer. Therefore, the OU would seem a better alternative for the patient and family. They imply however that all transfers were subsequently admitted to the tertiary hospital however they do not state the admission rate.

Four studies identified their admission rates of 25 % (Crocetti *et al.*, 2004; Levett *et al.*, 2006; Miescier, Nelson, Firth, & Kadish, 2005; Silvestri & McDaniel-Yakscoe, 2005). Levett *et al.* (2005) did however identify that the admission rate for children who stayed in the unit longer than 8 hours was 8% and that 49% (1974) stayed less than 3 hours of which 29% had gastroenteritis. There is confusion with regard to some of the data as some of the patients recorded as staying for less than 3 hours were subsequently admitted as inpatients. The majority of children stayed for between 3-8 hours (43%/1760 patients).

Hostetler *et al.*, (2002) undertook a retrospective study of a Combined Observation Unit (adult and paediatric). Of the children cared for in the OU (363) 19% were subsequently admitted. The average LOS in the unit was 11.2 hours. The data displayed in relation to the number of patients observed was different from between two of its tables – with regard to diagnosis they identified 5714 while the age distinction recorded only 5388 patients. This made some of the data difficult to interpret and to draw conclusions.

Venkatesh *et al.* (2011) reviewed Observation Care in US ED over a period of 7 years. They observed that inpatient admission rates from OU's had risen from 3.46% in 2001 to 21.46% in 2005, 18.25% in 2007 and a staggering 32.81% in 2008. The 2008 figures represented 4.6% of all inpatient admissions. They state the increase in admission rates is explained with

the development of OU's, the subsequent development of clinical pathways and protocols, changes in policies with regard to financial reimbursement and ED overcrowding. The rise in inpatient admission rates could, as they suggest, reflect the growth and development of OU's across the US.

Baugh *et al.* (2011) states that OU's reduce physicians been forced into the dichotomous discharge home or admit decision especially as patients are becoming more medically complex, require more diagnostic testing and therapeutic interventions. OU's, they suggest, can allow for specific and sensitive admissions thereby reducing inappropriate admissions.

The literature does support that the inpatient admission rate from OU's should be no greater than 20-30% with a few notable exceptions as discussed above.

2.4.5 Conditions suitable for SSOU's.

Children's OU's tend to be respiratory units, seasonal in nature and generally reflects current infections within the community (ACEP, 2011; Mace, 2001; Sinclair, 2007). Paediatric conditions tend to be of lower acuity compared to adults with peak volume attending the ED in the evening (Sinclair, 2007).

Paediatric acute medical illnesses and injuries are particularly amenable to short stay medicine care as a high proportion of these sick and injured children have no major pre-existing comorbidities (Hopper *et al.*, 2008). Children tend to suffer from a narrow spectrum of rapidly responsive conditions and generally have an adult carer who is willing to continue care at home. Acute paediatric illnesses (e.g. infections) are protean in their early manifestation and therefore observation is required to differentiate mild from severe. With access to primary care being withdrawn in the UK secondary care has had to take this

additional strain in caring for these children (Saxena *et al.*, 2009). 50% of all paediatric admissions are discharged home within two days (Hopper *et al.* 2008). Short stay unplanned admissions are expensive, place a strain on the health services, are disruptive to families and expose children to unnecessary risks. Therefore, OU's are suggested as a suitable alternative (Saxena *et al.*, 2009).

Selecting patients who are less ill for treatment in an OU can be more efficient then admitting them thus allowing patients with more complex conditions to occupy all the ward teams time (Abenhaim *et al.*, 2000). Most children treated in an OU present with medical conditions, with only 6.5-7.5% presenting with surgical/traumatic conditions (ACEP, 2011).

Table 3. Medical Conditions

Ten most common conditions identified in literature review (Appendix 2) – which were referenced in 23 articles
• Asthma
• Dehydration
• Gastroenteritis
• Pneumonia
• Abdominal Pain
• Seizures
• Fever
• Croup
• Accidental Poisoning
• Minor Head Injury

Gastroenteritis and Dehydration were identified in this review as one of the most common reasons for admission to an OU. While the admission rates to inpatient wards varied from 4-27% all the studies suggested that these conditions are ideal for observation care. McConnochie, Connors, Lu, & Wilson (1999) identified that the mean time for rehydration of

a child in hospital was 6.4 hours whereas the mean time for discharge was 44 hours. They observed that 22.7% of patients who arrived to an inpatient ward were no longer dehydrated. While none of the other studies had such significant findings however Crocetti *et al.*, (2004) identified that gastroenteritis/dehydration had “ *t h e l o w e s t a d m i s s i o n o r* (page, o n o r 20).

Respiratory conditions (i.e. Asthma, Pneumonia, Bronchiolitis and Croup) if taken together made up the largest group identified as been suitable for care in an OU. While admissions rates varied Croup was identified as being very successful managed in the OU setting with an admission rate of only 4-9% identified (Scribano *et al.*, 2001; Wiley, 2001; Zebrack *et al.*, 2005). Of note, Bronchiolitis and Pneumonia had higher admission rates in three studies ranging from 43-50% (Crocetti *et al.*, 2004; Mahajan *et al.*, 2013; Zebrack *et al.*, 2005).

Accidental poisoning seems ideal for care in an OU due to the pharmacokinetic parameters of absorption, distribution and elimination for most toxicants which leads to a somewhat predictable recovery patterns (Calello *et al.*, 2009). Discharges rates of 95-96% were observed in some studies (Calello *et al.*, 2009; Mahajan *et al.*, 2013; Najaf Zadeh *et al.*, 2011; Scribano *et al.*, 2001; Wiley, 2001).

Alpern *et al.* (2008), Holsti *et al.*, (2005) and Zebrack *et al.*, (2005) identified a 5% and 6.5% admission rate for minor head injuries.

Certain conditions may not be suitable for OU care:

Table:4 Conditions not suitable

Conditions which may not suitable for OU care.
<ul style="list-style-type: none">Ø Respiratory conditions requiring supplemental oxygen therapy have a higher likelihood of admission (Alpern <i>et al.</i>, 2008; Miescier <i>et al.</i>, 2005; Silvestri & McDaniel-Yakscoe, 2005).Ø Increased admission rate associated with children requiring Intravenous Fluids or Medications and cardiorespiratory monitoring (Alpern <i>et al.</i> (2008); Najaf-Zadeh <i>et al.</i>, 2011).Ø Children less than one year of age at a higher risk of admission although this was not replicated in any other of the studies (Najaf-Zadeh <i>et al.</i>, 2011).Ø Neonates should not be treated in an OU but in specialised units and questions whether children less than six months should be admitted either (Mace, 2001).Ø Children over 12 years of age with abdominal pain highly susceptible (41%) for admission therefore not suitable for care in an OU (Zebrack <i>et al.</i>, 2005).Ø Non-accidental overdose in adolescents are less suitable as they generally require psychiatric evaluation (Calello <i>et al.</i>, 2009; Mace, 2001).

However the literature supports that careful admission of suitable conditions to OU's can ensure that children are discharged home after initial assessment and treatment rather than admitted to inpatient beds.

2.5 Conclusion

This chapter explored the literature in relation to children's OU's and in doing so identified four themes that were explored in detail. The development of CDU's within the adult emergency service in Ireland has not been mirrored within the children's hospitals. The literature supports such a development with the numerous benefits it can bring to the child, parent and staff. However, there are risks with regard with regard to bed designation as demonstrated in the US. If the beds are incorrectly coded they run the risk of not receiving the financial remuneration from both governmental and private bodies.

OU's are an alternative to inpatient care for children with certain medical conditions. Children are uniquely suited to OU care, as they tend to have no existing comorbidity that can delay recovery. The literature suggests that there is increased parental satisfaction with such units over traditional inpatient care. Cost savings have been shown for hospitals due to reduced patient LOS.

Given the consistency of the literature, hospitals can be confident that developing that OU facilities is in line with best practice as evidenced by the literature and international trends.

Chapter 3: The Change Model

3.1 Introduction

In this chapter the management of the change process will be outlined using a structured Organisational Model that was selected to help guide the project. Change is a constant feature of the health service, for leaders to successfully lead the process they must have a deep understanding of the process. Change has to be carefully managed or it is doomed to failure (Kotter, 1995) and using a defined model can increase the likelihood of success (Leeman, Baernholdt, & Sandelowski, 2007). This chapter will outline how the culture of an organisation can affect the change process, a review of change models and why the Health Service Executive (HSE) Change Model was chosen (2008). Finally, a full description of the project will be discussed using this model will be undertaken.

3.2 Culture

Early on in the project it became apparent that this change would involve changing the culture of the organisation with regard to how care is delivered.

The most effective change projects are ones that are aligned with the culture of the organisation (Oakland & Tanner, 2007). Culture has been shown to have a powerful influence on an individual's belief about what is important and appropriate (Caldwell, Roby Williams, Rush, & Ricketts, 2009). Culture is often spoken in terms of “*the way we think*” (McAuliffe & Van Vaerenbergh, 2006, page 68) and any attempts to change it can be challenging (Brazil, Wakefield, Cloutier, Tennen, & Hall, 2010).

The culture within an organisation may not be uniform and some cultural attributes may only be prominent in some sections of the organisation leading to subcultures (Davies, Nutley, & Mannion, 2000). Subcultures can increase the difficulty in managing change as they may welcome it or actively resist preserving their status (Davies et al., 2000). For change to be successful it requires engagement, participation and commitment of staff at all levels (Werkman, 2009). It was identified that two subcultures (nursing and medics) within the organisation would require careful consideration due to the impact this change would have with regard to how they care for patients. Employees often favour their own “strong” culture as it reinforces shared values and ways of doing things, however too strong a commitment can decrease flexibility and inhibit creativity (Gill, 2011).

This project not only changes the work practices of many of the staff but also the way they provide that care, from inpatient care to observational care. It calls into question the vision, purpose and strategy of the organisation. The change proposed is in line with a newer vision for the organisation requiring a change in the culture of care provided. This change requires staff to work within new care pathways for children in the OU. People can become culturally blinkered thinking what has worked well in one place will automatically work well in another (Handy, 1993). Brazil *et al.*, (2010) warns that structures initially designed to improve quality of care may become counterproductive if they are not aligned with the organisations culture. This proposal requires the organisation to adapt to changing external demands with regard to delivering care in a new way. Schein (2009) warns that an organisation needs to evolve and warns that a culture may become a constraint on an organisations survival if they resist change too strongly. This can lead to a maladapted company where the process of transformation that is required in healthy young and midlife organisations is lost (Schein, 2009).

Currently children requiring a period of assessment are generally admitted to wards. This results in a longer period of stay due to traditional ward processes. OU's have been suggested as an alternative to inpatient care. Changing this model of care will involve staff looking at their "way of doing things" and adapting them in favour of observational medicine. Drastic unlearning and letting go of things deeply valued can be difficult for some, which can lead to resistance (Schein, 2009).

3.3 Why the HSE Model?

Models of change can assist with a successful outcome (Leeman et al., 2007) and when used correctly can lead to achieving the desired state of change (Shanley, 2007). However like leadership theories there is a wide range of confusing and often contradictory models available (McAuliffe & Van Vaerenbergh, 2006). Burnes (1996) warns that there is "*n o b e s t w a y t o*" manage change rather that the approach adopted should be suitable for the circumstances. Change is complex, the environment constantly changing and therefore so should our approach change adapt as we proceed (Burnes, 1996). Lewin's model of change which consists of three stages: unfreezing, moving and refreezing is often quoted (HSE, 2006). However often stated as being too linear and only suitable for stable organisation (Burnes, 2004) as opposed to the ever changing environment of the health service. Kotter's eight stage model with an emphasis on developing a sense of urgency, creation of a vision and generating short term wins (Gill, 2011). However, often criticised as emphasising "command and control", of securing compliance rather than being people-centred (Gill, 2011). These planned models assume organisation operate in stable environments, free from politics and conflict (Burnes, 1996; Shanley, 2007) with an over emphasis on management (McAuliffe & Van Vaerenbergh, 2006). While change must be well managed, effective leadership is necessary for change to be successfully introduced and sustained, these are two

distinct but complimentary processes (Gill, 2011). These linear models suggest that if you follow their steps that change is inevitable. These linear models don't allow for the complexity of change and therefore where not chosen.

The HSE Model (2008) specifically designed for organisational development and places a strong emphasis on the people involved in the change process. It recognises that change is not linear but cyclical, that it requires leadership and participation with a common shared vision. They have incorporated regular feedback loops, measurement and evaluation stages. It recognises that change is not easy and takes time that involves cultural, structural and process change for it to be successful. With less versatile linear models, resistance can disrupt the momentum leading to stagnation. The HSE model recognises that resistance is to be expected and incorporates "feedback" loops where the change agent can step back to an earlier stage to deal with met resistance before proceeding onwards. This model was developed by adapting various elements from other models to suit the Irish health service (HSE, 2008). Finally, they provide on line resources to assist with the process. It is for these reasons that the HSE Model (2008) was used in this project.

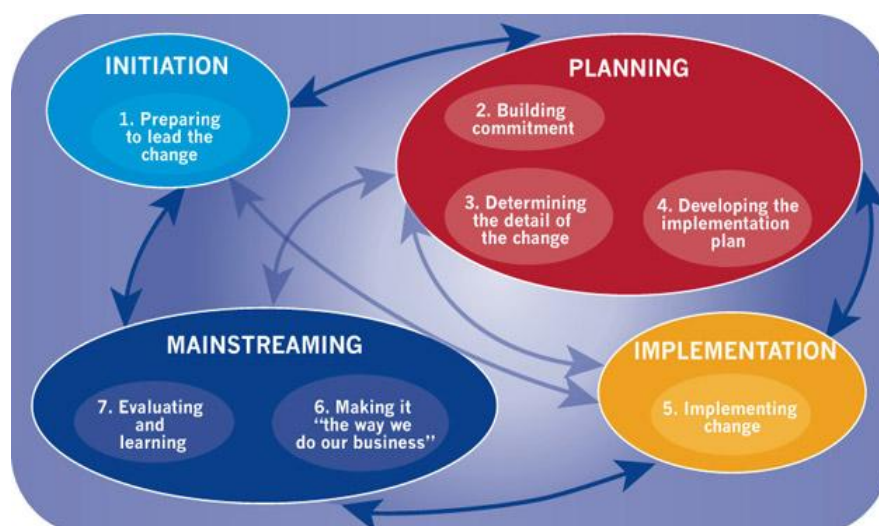


Figure 1. HSE Model (2008).

3.4 The Change Model:

3.4.1 Initiation

Time and effort spent at this stage has been shown to contribute significantly to a successful outcome (HSE, 2008). One of the strengths often associated with counselling-based models is that they identify a “*pre-identification stage*” in their model (Prochaska, DiClemente, & Norcross, 1992; Young, 2009). It identifies that individuals at this stage may be unaware of any problems and therefore the need for change. Similarly, organisations may not be aware of problems until a crisis or scandal occurs (Young, 2009). He stresses that it is important to raise awareness to the signs of the potential need for change. The HSE Model (2008) incorporates such a “pre-stage” where the need for the change is identified. Change is driven by external or internal factors (HSE, 2008). However, in the public sector, external factors have greater influence than they do in the private sector. The public sector is often seen as the instrument for politicians to pursue their mission and values (Gill, 2011) with change being forced upon them (Firth-Cozens & Mowbray, 2001). Public sector organisations are subject to multiple external authorities (e.g. government agencies, legislation, politicians, lobbying groups and the media), greater scrutiny while their goals may be numerous, intangible and conflicting (Perry & Rainey, 1988).

Despite change often being imposed on leaders themselves from external forces they must act as change agents prompting others to follow (Kavanagh & Ashkanasy, 2006). This change was externally driven by the Minister of Health to improve efficiency in the children’s ED and to ensure no child was left on a trolley in ED waiting for a bed. Despite external influences, the author assumed responsibility with regard to leading the change. Transformational leadership is suggested as the most suitable style for the health service with

its emphasis on shared vision and responsibility (HSE, 2008; NHS, 2011). Transformational leaders raise followers aspirations and activate higher order values (e.g. altruism) (Avolio, Walumbwa, & Weber, 2009). They suggest that followers identify with the leaders vision ensuring greater performance and commitment. Transformational leaders go beyond exchanging contractual agreements for the desired change by actively engaging the followers personal value systems (Kavanagh & Ashkanasy, 2006). Secondly, they suggest that leaders act as role models stimulating followers to think about existing methods in new ways and encouraging them to challenge their own values, traditions and beliefs. This leadership style along with the HSE Model of change guided the change process.

It is clear from the literature review undertaken that Observational Care is a safe, efficient and acceptable alternative to in patient care. Both government and professional bodies have supported observation unit development. Recent funding to build the unit proved instrumental in increasing the urgency for this change. A degree of urgency can provide an important motivator for focused action (HSE, 2008).

The next step in the initiation phase was to map the key stakeholders and influencers prior to engaging them on a formal and informal basis. A stakeholder analysis was undertaken to:

1. Map out key stakeholders, their relative involvement and importance for the process so as to engage them early on and
2. To identify any potential concerns they might have.

<p>↑</p> <p>High</p> <p>Importance</p>	<p>High Importance/Low Influence</p> <p>CEO.</p> <p>Clinical director.</p> <p>NCHD's.</p> <p>Finance Dept.</p> <p>Local Community</p>	<p>High Importance/High Influence</p> <p>COO.</p> <p>Consultants.</p> <p>Nursing Management.</p> <p>PMAC.</p> <p>Nursing Staff.</p> <p>Clerical Staff.</p> <p>Healthcare Assistants.</p> <p>Trade Unions.</p>
	<p>Low Importance/Low Influence</p> <p>Adult Service.</p> <p>Support services (e.g. IT, stores, catering).</p> <p>Ancillary Services.</p> <p>Portering.</p>	<p>Low Importance/High Influence</p> <p>Fundraising.</p> <p>Other two Children's Hospitals.</p> <p>CEO of Children's Hospital Group.</p>
	Low	<p>Influence →</p> <p>High</p>

Table 5. Stake Holder Analysis.

The analysis helped to clearly identify what staff were affected by this change as well as clearly identifying the interest and influence they might have with regard to its successful implementation. The analysis helped identify what groups required representation on the SSOU Operations Committee. It also identified that a sponsor was required. Sponsors greatly influence the possibility of success. They ensure power, authority and the necessary support and resources (Borrill & West, 2001; Sirkin, Keenan, & Jackson, 2005). The Chief Operations Officer (COO) was approached and agreed to be the sponsor for the project.

Prior to the first meeting of SSOU Terms of Reference were drawn up and circulated to all team members (see Appendix 3). This was undertaken to communicate early on the intended objectives and outcomes for this team with regard to the proposed change. Early participation in creating a case for the change and determining the objectives can lead to greater support for the change effort (HSE, 2008).

Prior to engaging staff, an analysis was undertaken to identify Strengths, Weaknesses, Threats and Opportunities (SWOT) with regard to this project. It is used to identify and capitalise on organisational strengths, while controlling or reducing its weaknesses, neutralising threats and exploiting opportunities (Gill, 2011).

Table 6. SWOT Analysis.

Strengths	<ul style="list-style-type: none"> • Staff – expertise and commitment. • In line with current international trends and the New Children’s Hospital Model of care (Satellite units). • New management structure - directorates. • Establishment of the Children’s Hospital Group with CEO • Fiscal sponsor (HSE).
Weaknesses	<ul style="list-style-type: none"> • Staff Morale/anxiety with regard to the future status of the hospital. • Reduced Hospital admissions and its implications. • Reduced in patient activity unless bed designation is agreed.
Opportunities	<ul style="list-style-type: none"> • Streamline ED services. • Reduce Inpatient admissions x 10-15%. • First SSOU in the country – leader. • Promotional opportunities for nursing staff. • Improved patient and parent experience.
Threats	<ul style="list-style-type: none"> • Change Processes, too many, too soon (loss of focus, priorities and direction), Change fatigue. Hospital moved in 1998 to new site, now further change with future major changes in 2016-2018 with new Children’s Hospital. • Staff not willing to deploy to new department. • Loss of revenue due to reduced inpatient services from both statutory bed levy and private insurance. • Lack of engagement by consultants due to possibility of Loss of income from private inpatient care. • Designation of beds from inpatient to observational.

(Gill, 2011)

The SWOT Analysis helped in identifying early on where the change agent would need to direct energy, to neutralise or reduces weaknesses and threats while capitalising on strengths and opportunities presenting themselves through this project.

The SWOT analysis was also used to populate a force field analysis (Appendix 4). This further enabled the change agent to identify the driving and restraining forces for the change (Senior and Swailes , 2010). Although there were strong restraining forces the impending new model of care and the new Children's Hospital were stronger forces. As the driving forces were greater than the restraining forces, it was possible to continue with the process bearing in mind that measures would have to be used to remove or reduce the restraining forces.

3.4.2 Planning

The purpose of the planning stage is to determine the specific detail of the change and to create support for the change process (HSE, 2008).

3.4.2.1 Building Commitment

Leaders must communicate the need for the change and verify to staff that the change is indeed necessary (Fernandez & Rainey, 2006). The appropriateness of the change needs to be articulated and accepted by staff for real change to occur (Holt, Self, Thal Jr, & Lo, 2003). The difficulty here was that the change process was externally driven and as a result not all the team members were fully committed to the process. Young (2009) warns that "Mindless Change" can occur when participation and validation for the change does not occur resulting in a lack of ownership. However, early engagement and communication for the change assist with overcoming resistance and increases the likelihood of success (Gill, 2011). Creating a

shared vision was vital in getting the team members on board and combatting resistance. The first meeting met with a lack of commitment for the vision being verbalised by many team members. Some of the team asked how the team leader would convince them and their colleagues to support the project. Worries and concerns that had been raised at the initial meeting were investigated so that they could be addressed at the next. If the team didn't believe in the vision then it was doomed to failure before it even took off. A communication plan was devised, using the stakeholder analysis and force field analysis, to direct the communication strategy for all stakeholders involved (Appendix 5).

Transformational leaders energise and empower their followers to act by providing an exciting vision for the future (Özaralli, 2003). Gill (2011), states that a vision should reflect the values of the person or organisation and that it directs the change. In an effort to communicate this new vision, a folder of information was developed and circulated to each team members and all relevant departments. It consisted of a selection of key interesting articles identified during the literature review. A notice board was also used to display key information in the staff tea room. These articles included information on:

- models of care,
- conditions suitable for treatment in an OU,
- literature reviews on paediatric OU's,
- financial benefits,
- benefits to children, their parents and staff.

The folder also contained information regarding the New Children's Hospital and the proposed OU's to be developed on all three sites (CHGB, 2014). In an effort to reach a wider audience the hospital intranet staff magazine was used to disseminate information regarding the development. Design plans were also placed in the ED waiting room and staff tea room.

The local newspaper was contacted in an effort to communicate the development to the local area. This was undertaken in the form of a naming competition for the unit. The paper agreed to run this competition, along with information regarding the unit, over a two week period (Dennehy, 2014a; 2014b) (Appendix 6). It was hoped that this would lead to local interest while allowing for wider communication throughout the locality.

3.4.2.2 Determining the detail of the change.

At this stage, it is necessary to assess the current situation in order to determine the detail of the change and to outline what the organisation has already in place to support success (HSE, 2008).

A review of the literature was undertaken with regard to the conditions determined to be suitable for the unit. A review of all ED and Inpatient attendances was undertaken for 2012 with regard to admissions (Appendix 7, 8 & 9). For ED particular attention was given to registration times and with inpatient the average length of stay (LOS) for the proposed conditions was of particular importance.

The ED currently keeps some patients in its department for observation purposes. However, they believed that this reduced their efficiency to see and treat patients as their cubicles are blocked for several hours with these patients. Following a review of the ED data, literature and lengthy discussions the conditions deemed suitable for the unit was agreed (Appendix 8).

Anecdotal evidence in our hospital and research suggests that inpatients LOS is prolonged due to the traditional consultant early morning ward round times (McConnochie *et al.*, 1999) . Presently patients admitted after ward rounds wait for the following day to see the consultant unless clinical indications determine otherwise. Hospital admissions tend to occur after the rounds and therefore given the hospital work pattern it is not surprising that length of stay can

be greatly increased. For this to improve a redesign of the way we deliver care from a provider centric approach, with a focus on operating at the convenience of the provider rather than the patient (Battles, 2006). OU's provide this patient centred approach and therefore is very much in line with the National Standards for Safer Better Healthcare in Ireland (HIQA, 2012).

Although there was a degree of readiness (Caldwell et al., 2009) on the part of the consultants and nurse management for the change there was some reluctance due to the fact that it might increase their workload. Research has shown that change is more likely to succeed if work load does not increase by greater than ten per cent (Sirkin et al., 2005). A review of all ED attendances was undertaken to determine the opening times for the OU (Appendix 7 & 8). To keep in line with the New Children's Hospital satellite times and to address concerns about additional workload it was agreed that the opening times would initially be 10.00-22.00, Monday to Friday excluding Bank Holidays. This would allow this unit to "pilot test" the times for new Satellites which should come on stream in 2016. In recognising staff concerns regarding the times (Appendix 10) it was agreed we would review these six months after it opened. This would also allow us to assess whether the proposed opening times for this unit and for the new satellites for the children's hospital are suitable (CHGB, 2014)

External supports may be required if management lack the technical or project management expertise (Oakland & Tanner, 2007) and therefore it was decided to seek assistance with regard to the appropriate nursing staffing levels for the unit. Nursing management agreed on a nursing ratio of two nurses for eight patients for each shift. However, what the total staff complement for the unit remained under discussion.

Some of the team had worked abroad in hospitals that had developed OU's. Networking has been shown to assist in developing more complete, creative and unbiased views on issues

(Timmins, 2008; Uzzi & Dunlap, 2005). Using networks it might be possible to imitate what has already been developed and thereby reduce time and waste of resources inventing our own (Abrahamson, 2000). Abrahamson (2000) terms this “shameless borrowing” which he says should be encouraged in organisations. With that in mind, we contacted colleagues in the UK and Australia. The New Children’s Hospital Group Board identified a satellite hospital in Salford, England as a role model for an observation unit. They were contacted and a site visit arranged for some members of the team.

3.4.2.3 Developing an Implementation Plan

The purpose of this stage is to undertake a detailed design of the organisational, service and cultural changes that are required to achieve this vision. Organisational culture has been shown to have a significant impact on the change process (Oakland & Tanner, 2007). Recognising what the culture is within an organisation can increase the likelihood of success (Burnes, 1996). It was recognised that this new vision was not merely about developing a new unit but would change the culture of care provided to the patients and their families. This new model of care would require a new clinical governance structure for the medic’s, nurses and clerical staff. A draft governance document was drawn up and circulated to the team members (Appendix 11). After several meetings and drafts it was agreed that the unit would have a shared governance structure. The medics would look after eight specific medical conditions and the EM consultants would also have admission rights. Allowing EM consultants admission rights would allow for a greater flexibility with regard to admission. initially they would admit minor head injuries, cellulitis and migraine patients. These patients would remain under their care until a decision to discharge or admit (as an inpatient) was taken.

An implementation plan was devised to guide the change process and so that a clear outline of the project could be visualised by the team members (Appendix 12). While designing the implementation plan it became apparent that input from clerical management and the finance department was required. Representatives from each was sought and given.

At this stage a further information document was circulated to all nursing staff as it is now possible to visualise what the change might mean for them. Feedback, in the form of a survey was attached to this circular. Feedback, can sometimes be seen as resistance so it is important that the change agent receives the information positively (Ford, Ford, & D'Amelio, 2008). Ford *et al.*, (2008) warns that a change agent can be “biased” towards the change which can lead to unintentional representations. They state that change agents must communicate regularly and enthusiastically and what is communicated must be truthful, realistic and accurate. The response rate from the ward staff nurses (n=63) achieved a 76% response rate, of which 73% (n=35) stated that they had been kept fully informed with regard to this development. Theatre nurses (n=10) achieved a response rate of 70% of which 57% (n=4) stated that they had been kept informed of the initiative. This data allowed the change agent to improve the methods of communication to reach a bigger audience within these areas.

Healthcare with its interdependent care processes can make it at times impossible to predict the full effects of the change (Leeman et al., 2007). At this stage a “pilot test” is often undertaken especially if the change is radical, costly, cultural, challenging or innovative (HSE, 2008). However, as with many projects this would not be possible due to the nature of the change. However, it was agreed the team would audit the service from the time of opening and review the data after six months.

A major build within the organisation overran and as the organisation did not want to have two major building projects taking place at the same time ours was deferred by several

months. This affected our agreed times lines especially with regard to opening and therefore equipping and redeploying staff, the new opening time would be late 2014 as opposed to the summer. To maintain the momentum and interest it was necessary to ensure the monthly meetings continued so as to maintain a sense of urgency regarding the project. While the delay was disheartening for all the change agent had to ensure that the enthusiasm for the project did not wain. The delay also allowed time for some of the team to visit an OU in the UK, this in itself brought about a huge renewal of enthusiasm for the project.

3.4.3 Implementation

At this stage the “old ways” are being dissolved and the new ways of working are being implemented (HSE, 2008). Timmins (2008) warns that it is not always the change that is resisted but the manner in which it is communicated and implemented. She stresses that even when the change is welcomed if poorly implemented it can cause a cascade of responses which can threaten to derail the process. Undertaken change with people rather than to them has greater chance of success (Higgs & Rowland, 2011).

Leadership is important with regard to setting the vision, values and sense of urgency with regard to the change but for it to be successful it has to be managed appropriately (Holt et al., 2003). Front line managers, they stress, play an important role. Employees generally trust them as they have built up a relationship with them while leaders may be seen as remote figures. Leeman *et al.*, (2008) stresses the hierarchical nature of nursing demonstrates the importance of the nurse manager role and indeed one can greatly benefit from their supervisory role when implementing change. Managers can ensure that the process is kept on track and at the same time identify early on any issues that might arise early on in the process (HSE, 2008). With this in mind I met regularly with both nursing and clerical management with regard to staffing the unit, to look at proposed working rosters and to identify potential

problems that might arise. A nursing work force planner was engaged at this stage to assist with the work force plan in relation to nursing staff levels. It was agreed that 4 nurses and 1 clinical nurse manager would be required (Appendix 13).

It was more difficult to meet the consultant team members due to their work schedules and commitments. Communication was therefore via email or at our monthly SSOU meetings. Critical to this success was agreeing the governance structure which would then have to be presented to Paediatric Medical Advisory Committee (PMAC) for ratification. The crucial elements were what conditions were suitable for the OU and who would ultimately have admission rights to it. Several drafts were written following feedback from consultants as well as nursing staff prior to it being presented to PMAC.

As the building project was delayed by several months, the momentum threatened to stall. The sense of urgency which Kotter continually emphasises was being lost due to the extra time granted due to the delay (Kotter, 2008; 1995). Kotter (2008) states that we must create an “urgency mindset” which is that “ *t h e r e a r e g r e a t o p p o r t u n i t i e s we must deal with them*” (page 3). As the change agent, it was important to stress the continued urgency and to model the new behaviour with regard to the vision (HSE, 2008). Therefore, at the next meeting the TOR were reviewed, also we discussed the risks and opportunities for the project. It was stressed that much of the success hinged on agreeing a clinical governance structure which was required for the other team objectives to be reached. If the governance structure could be agreed the staff would see it as a real entity and not just a “dream” of things to come. It would also allow clinical pathways to be drafted in line with the agreed clinical conditions for the unit. Once the governance structure was agreed by PMAC, it would then be sent to the COO to bring to the Executive Management Team (EMT).

The change agent arranged several meeting with Medical Physics and clinical Engineering to discuss the equipment required for the unit. Infection Control and the purchasing department were consulted with at this stage to ensure compliance with governmental and hospital policies. Financial support for all the equipment was still not finalised and would require the active participation of our sponsor at senior level. Several meetings were arranged with the sponsor to discuss the equipment requirement for the unit. The children's fundraising committee agreed to provide funding towards soft furnishing to make the unit child and family friendly. The equipment list was given to the COO and requested to secure the funding required (Appendix 14).

3.4.4 Mainstreaming

This stage focuses on integrating and sustaining the change into new ways of working and behaving (HSE, 2008). For change to be permanent it must become part of the organisations culture or "the way we do business here" (HSE, 2008). Central to this new vision was that this development was at the very core of the new National Model of Care for Paediatric Healthcare in Ireland (NPHDB, 2010) and the new National Children's Hospital (CHGB, 2014). It is proposed that in 2016 the organisation in which this project was undertaken would become a satellite unit for this new hospital. This satellite unit would have an ED, Observation Unit and an Outpatients therefore this development was very much in line with future developments for this hospital. The change agent relentlessly communicate this to all staff throughout the process.

Agreeing the governance structure was central to its success. The consultants, nurses and clerical staff signed off on the draft proposal which was then sent to PMAC for ratification. The actually finalisation of how the unit would be operated on a daily basis was still under discussion. Some consultants wanted a "hot week" system where one consultant would

manage the unit for a full week other believed a shared system would be better. It was agreed that all consultants would consider each proposal and to have an “away” day in May or June to finalise operational issues. Registrar cover for the unit would be decided at that point. A review of their rota’s would be undertaken by the SSOU committee and consultants to identify how best this might be managed.

Higgs and Rowland (2011) tell us that if engagement and participation have been part of every stage then employees will have ownership of the change. This then results in change with staff rather than change directed at them. Having representatives from key stake holders allowed this process to culminate in acceptance of this new vision for the organisation. This new vision involves treating patients in an observational unit who would have normally be treated as inpatients. This obviously changes the “way we do business” but has obvious benefits for the child and their families. The agreed conditions suitable for OU care were documented in the governance documentation (Appendix 11).

A focus group was held with nursing management, it consisted of the lead ADON, two CNM3’s and 2 ward CNM2’s (Appendix 15). Focus groups are seen as a means of gathering views, opinions and beliefs on a particular subject from a number of participants in a single sessions (Carney, 2000). The nurse managers concerns reflected those of the staff although they remained very positive regarding the development. While there was a degree of apprehension regarding the future the nurse managers agreed it was a positive advancement for child care within the organisation.

It was agreed by hospital management that a ward that seasonally closed would not reopen when the unit was opened. This would mean that additional nurses would be available to staff the unit. It was agreed that the unit would be staffed through internal competition and by way of voluntary redeployment. An additional post was also being kept vacant until the unit

opened in case an external staff was required to supplement numbers. The excess staff from the ward closure would replace staff successful in their interview. To gauge support for this redeployment a staff survey was undertaken. Staff nurses from the wards and theatre were surveyed (n=73) and a response rate of 75% (n=55) was achieved. Of these 71% (n=39) responded that they would be interested in redeploying to this area, 15 staff said they were not and 1 stated that they would consider it (Appendix 16). This has implications for management in that the level of interest by staff should significantly reduce any Industrial Relations issues with such voluntary redeployments.

The finalised equipment list and costing were presented to the COO who agreed to fund these from the HSE finances provided. Additional funding was requested from the fundraising committee who agreed to fund the eight televisions and the iPads that were requested, indeed they offered additional funding some it be required.

3.5 Conclusion

This chapter traced the change process using the HSE Change Model (2008) through its different stages. The support from the literature review and the site visit were powerful drivers in helping persuade those less convinced in the initial stages. The HSE's Model with its clear focus on a SWOT, Stakeholder and force field analysis ensured stakeholder engagement throughout the project which bore fruit in the staff nurses survey and the focus group support for the development. Embedding the change within the organisation is the final stage of the process but due to external delays, the project did not reach that stage. However, although there are some concerns with regard for the future the support received will ensure a successful completion to the project towards the end of this year. The HSE Model (2008) finishes with an evaluation stage and this will be undertaken as part of the next chapter.

Chapter 4.0 Evaluation

4.1 Introduction

Evaluation has been defined “*as the systematic and structured process of reviewing an experience, determining its worth or value and deciding what needs to be changed or further developed*” (HSE, 2008. Page 67). It occupies an increasingly amount of time in the public sector, serving many political functions such as an a analysis of spending and the allocation of resources while assessing employee accountability (McNamara, Joyce, & O’Hara, 2010). Demands for value for money have resulted in evaluation with regard to accountability and quality taking a central role. They suggest, that evaluation has progressed so far that it is no longer simply concerned with measurable outcomes but with process, stakeholder roles, values and quality. They further suggest that evaluators have to consider that any programme of change can have far-reaching implications outside the local area and evaluate its significance over time and in relation to other settings.

This project involved using the HSE Model of Change (2008) and an organisational development (OD) approach to change. OD facilitates change at all levels of the organisation- individual, group and organisation (Senior & Swailes, 2010). The setting of “hard” objectives and quantifiable measures makes evaluation more straightforward. However, in “softer, more messy” situations where OD is commonly used measurement in relation to attitudes, behaviour and cultural norms is also required (Senior & Swailes, 2010). This is commonly undertaken through surveys, interviews, focus groups, observation or an examination of staff absenteeism/turnover as an indication of staff morale and wellbeing.

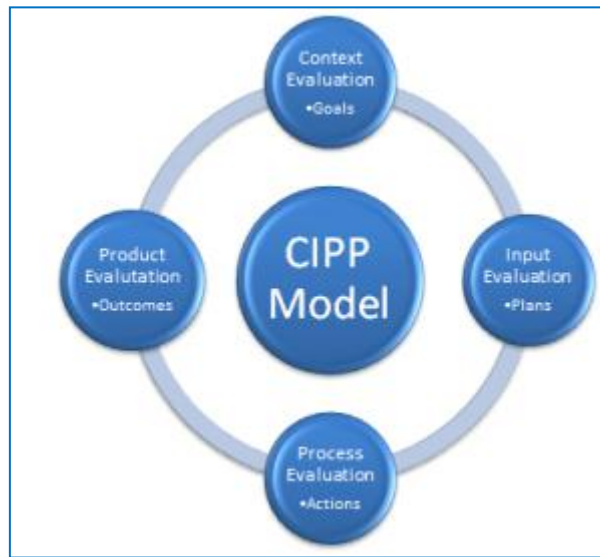
4.2 Evaluation Models

Several evaluation models were reviewed for this project. Jacobs ten stage model recognises the complex environment in which evaluation occurs and therefore allows the change agent to revise their position at several stages (Frye & Hemmer, 2012; McNamara et al., 2010). However, due to its complexity and with the inability to evaluate all the objectives within its stages it was discounted. Kirkpatrick's four tiered model developed to evaluate training outcomes and development in education was considered goal centric (McNamara et al., 2010) and was not therefore suitable for this project. The linear simplicity of the Logic Model was considered however it did not allow for unanticipated developments that tend to occur with change projects (Patton, 2011). The CIPP model allows for modification in the change process with a focus on programme improvement rather than outcomes (Frye & Hemmer, 2012). As it is not a linear process and allows for modification through the change process it was used as the evaluation model.

4.3 CIPP Model

Daniel Stufflebeam, in the 1970's, developed the Stufflebeam model now more commonly known as the CIPP Model. CIPP is an acronym for the four complementary components which are considered critical to the evaluation process: context, input, process and product (Zhang et al., 2011). The context identifies goals and priorities while identifying the opportunities and impediments. The input evaluation reviews alternative processes and allows comparisons to ensure the best process is being used. The process evaluation is an assessment of the implementation of the project and how it worked in practice. The final stage is the product evaluation which evaluates the impact, effectiveness and outcomes of the project (Frye & Hemmer, 2012).

Figure 2. CIPP Model.



4.3.1 Context

The rationale and requirements for the change are at the core of the context evaluation (Stufflebeam & Shinkfield, 2007). The context study findings provide a baseline for evaluating later outcome (Products) (Frye & Hemmer, 2012). The context within which this project took place was described in detail in Chapter 3. In summary, it is the commissioning of a Short Stay Observation Unit (SSOU) within a Dublin Hospital. The initial driving force was external in the form of the HSE. However, it is clearly in line with the new National Model of care for Paediatrics in Ireland (NPHDB, 2010) and the new National Children's Hospital (CHGB, 2014). The Irish Health service and in particular ED's there is mounting pressure to provide efficient and effective care while ensuring the patient experience is positive (HIQA, 2012; HSE, 2013; SDU, 2013). Therefore, it is a high priority within the organisation to meet SDU targets in relation to ED waiting times and to improve the quality

of access to unscheduled services (SDU, 2013). The literature review identified that SSOU's can significantly assist with this process.

4.3.2. Inputs

The Input evaluation assesses the feasibility of the product while looking at any alternate approaches and identifying any additional resources that might be required (Frye & Hemmer, 2012). The focus is on how best to bring about the change and requires the development of an implementation plan for the change project (Zhang *et al.*, 2011). The implementation plan was undertaken in Chapter 3 as part of the HSE Model of Change (2008). An examination of the rationale for the project implementation is also required which involved an extensive literature review to identify appropriate and assess potential approaches (Frye & Hemmer, 2012) to the commissioning of the SSOU. The literature identified that there are several approaches with regard to the governance of the unit and that the structure generally chosen related to healthcare system in which they operated (RCPCH, 2009). The literature review, in Chapter 2, did identify that it was a efficient and safe alternative to inpatient care with many benefits to the patient, parents and the hospital. The NPHDB, CHGB and the SDU are advocating SSOU development alongside ED; however, the governance structure was open to interpretation. The shared care model was chosen as it reflected the needs of the organisation and due to the fact it offered greater flexibility with regard to patient care (Napolitano and Saini, 2014). A requirement of this stage is to identify stakeholders and their level of interest to ensure communication with regard to their needs which must be kept in mind throughout the project (Stufflebeam, 2007). The stakeholder analysis for this change project was discussed in detail in Chapter 3.

As part of the Input evaluation the following implementation plan was developed and implemented:

Table 7. – Input Evaluation

Criteria	Achieved- yes/no
<ul style="list-style-type: none">• An extensive Literature Review was undertaken.	Yes
<ul style="list-style-type: none">• GANNT chart was devised.	Yes
<ul style="list-style-type: none">• A SWOT analysis was undertaken to identify any potential barriers to the change Project.	Yes
<ul style="list-style-type: none">• A Stakeholder analysis and communication strategy was undertaken.	Yes
<ul style="list-style-type: none">• Force Field Analysis Undertaken.	Yes
<ul style="list-style-type: none">• An implementation Plan was undertaken..	Yes
<ul style="list-style-type: none">• Visited an exemplary unit in the Salford (UK).	Yes

4.3.3 Process

Process evaluation involves the actual assessment of the implementation of the change into practice (Frye & Hemmer, 2012). This stage allows for an evaluation with regard to the project, to ensure it is achieving its desired outcome however it may also identify any

unintended outcomes that might arise (Zhang *et al.*, 2011). The HSE Model (2008) places an important emphasis on continual evaluation to ensure that when the process is completed that it will have fully embedded within the organisation. This is supported within the evaluation model chosen. The CIPP Model allows objectives to be used to evaluate the outcome of the change (Frye and Hemmer, 2012).

4.3.3.1: Objective 1: Establish a SSOU Operations Committee by October 2013 to assist in commissioning a SSSOU. Terms of Reference (TOR) for this committee to be written and ratified by 12th November 2013.

The Paediatric Clinical Director delegated the authority for establishing the SSOU Committee to the Business Manager with ongoing responsibility to commission an SSOU. It was decided that an interprofesional team would make up the SSOU committee. Interprofessional teams have been shown to reduce duplication of effort, improve job satisfaction, help overcome fragmentation of service delivery and improve patient safety, quality and services through collaborative working (Hammick, Olckers, & Campion-Smith, 2009; Reeves, MacMillan, & Van Soeren, 2010).

The decision making method during these meetings was by consensus. Consensus may be defined as “ *I c a n l* (Haggerty *et al.*, 2007). It was agreed when 80% of the committee agreed on an issue then we assumed consensus and the issue was then dropped from furthers discussion. For many of the issues, for example governance and the medical conditions for the unit this resulted in many meeting before this was reached.

The team consisted of the Business Manager, Lead Assistant Director of Nursing, Clinical Nurse Manager of ED, two consultant's one each from Paediatric Medicine and Emergency Medicine, the Chair of PMAC, Clerical Manager from ED and the Directorate Accountant.

The SSOU Operations Committee had its first meeting in October 2013. Terms of Reference (TOR) were agreed (Appendix 3). However, they were amended in February 2014 to reflect the ongoing role the committee with regard to supporting the unit upon its opening and to incorporate an audit responsibility for the unit.

Outcomes:

A total of eight meetings were held prior to achieving agreement over the governance structure for the unit. A shared governance approach between the ED and Medical consultants was agreed. The Clinical Nurse Manager 3 in ED was ratified as the nurse manager for the unit who would also be responsible for the Healthcare Assistants. The Clerical Manager for ED assumed responsibility with regard to the unit clerk. The conditions suitable for care within the unit were also agreed during this process (Appendix 11).

Ongoing clinical governance for the unit would lie with the consultants. A Clinical Nurse Manager (CNM) 11 will be responsible for unit on a daily basis and she/he will report to the CNM3. Following the Commission on Nursing Report (Government of Ireland, 1998) the title of ward sister was regarded as an anachronism and was replaced with CNM 1, 11 and 111 grades with 111 being the most senior. The SSOU committee will remain in place to support the unit development and to audit the units performance, this role would be reviewed six months following its opening.

4.3.3.2: Objective 2 Develop, agree and implement a governance structure for the SSOU by December 2013. The governance structure will be available to a 100% of staff for review by the 1st of January 2014.

The HSE commissioned the establishment of an SSOU at this hospital to reduce ED overcrowding in recognising that it is not just “*a n i s s u e o f w o r k f l o w b u t*

(SDU, 2013). To accomplish this they have provided funding for a SSOU to ensure more effective patient streaming which is in line with their “Unscheduled Care Strategic Plan” for 2013.

A shared governance structure between the medical and emergency medicine (EM) consultants was agreed (Appendix 11). Several professional bodies support EM consultants having a role in OU’s to facilitate admission avoidance and the unnecessary transfer of patients to paediatric units on a separate site (ACEP, 2011; CEM, 2008; RCPCH, 2009). Due to internal factors, the agreement with regard to the governance structure was not completed until March, full ratification by all the consultants occurred in April.

The governance document is in line with the Code of Practice for the Governance of State bodies 2009 in that it sets out the governance responsibilities the various parties responsible for the successful operation of the unit.

The HSE states that:

“ A l l m a n a g e r s i n t h e H S E h a v e a c e n t r a l control and must take a visible leadership role in ensuring that there is compliance w i t h t h e c o n (HSE, 2011. Page 64). e d u r e s ”

The HSE control framework is composed of 4 levels:

- Procedures and Policies established and implemented- the governance document clearly states the responsibilities of the referring team and those of the SSOU. Clear criteria with regard to the conditions deemed suitable are identified within the document. Admitting and discharge instructions incorporated into the documentation. Plans are in place to develop care pathways with regard to the selected medical conditions.

- Line and Operational management oversight and review adherence to organisational procedures- the SSOU will be a separate entity although in close proximity to ED and will report to the Paediatric Clinical Directorate. It will also report to the SSOU Committee which will continue in the medium term to support and develop the unit as it becomes operational.
- Internal Audit- the SSOU committee will continue to monitor the unit with regard to KPI's designed for the unit (Appendix 17). Compstat data from ED will also be monitored as they will be an indication of the units effectiveness with regard to reducing ED waiting time and increasing the Patient Experience Time (SDU, 2013).
- External Audit- the unit will make all data available that will be requested. As these patients will be inpatients this data will now be available on the HIPE System (Inpatient) and can be compared to the ED data (Symphony).

4.3.3.3: Objective 3: Identify and secure financial approval for the equipment required for the SSOU.

A needs analysis was undertaken to identify the equipment required based on the conditions identified for care within the unit (Appendix14). This was evaluated against the literature (ACEP, 2011; Mace, 2001; RCPCH, 2012) and bench marked against the hospital we visited in the Salford, Manchester, UK.

Medical Physics and Clinical Engineering, Infection Control and the Purchasing Department were all involved in this process. This was necessary to ensure that all the equipment to be purchased was suitable for the role intended. In seeking quotes for the equipment, it was necessary to meet hospital, governmental and EU procurement guidelines (OGP, 2010). The

equipment list was then presented to the COO for approval so that funding would be available under the construction fund as allocated by the HSE.

To enhance the unit additional equipment would be required to ensure the unit is child friendly. A total of eight wall mounted televisions and two Ipads were requested for this purpose. The HSE funding did not extend to non-vital equipment therefore additional funds was sought from the children's services fundraising department. The UK Government defines the *“third sector as non-governmental organisations that are value-driven and which principally reinvest their surpluses to further social, environmental or cultural objectives. It includes voluntary and community organisations, charities, social enterprises, cooperatives and mutual”* (Treasury, 2007).

The fundraising department agreed to fund these televisions and Ipads to enhance the department for the children and families attending.

4.3.3.4: Objective 4: Identify staffing levels requirements through work force planning (nursing, medical and non-clinical), negotiate agreement for redeployment of nursing staff and present a business case for additional staff as required.

An assessment of the staffing requirement was undertaken with both medical, nursing and clerical. This was discussed in Chapter 3 when a work force plan was undertaken (Appendix 13). Work force planning ensures a balance between the demand for staff and their supply. This requires estimating future demands on staff within the service while ensuring the availability (but not excessive) of appropriate qualified staff to meet the demand. (Imision, Buchanand Xavier, 2009).

Table 8. Work Force Planning (WFP) for Nursing

Grade	Clinical Nurse Manager 11.	Registered Children's Nurse.	Healthcare Assistant (HCA)	Total
Whole Time Equivalent (WTE)	1	4	2	7
Working Shift	10.00-18.30 (7.8 hours)	10.00-22.00 (11 hours)	10.00-22.00 (11 hours)	
Grade Mix	14%	57.5%	28.5%	100%

The nursing staff for the unit was agreed at two nurses for eight patients due to the recognition of the rapid high turnover of the patients. This equates to 4 nurses and 1 CNM which is in accordance with the Royal College of Nurses in the UK which states that there should a minimum of two nurses for four paediatric patients being cared for. A detailed discussion on this work force plan can be found in (Appendix 13).

Table 9. WFP for Clerical

Grade	Clerical Grade 3	Whole Time Equivalent Approved with 0.5 for the SSOU.	0.5 (WTE)
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A Business case was formulated for an additional 0.5 clerical officer, this was sent to our Manpower Approval Committee where it was approved (Appendix 20).

Table 10. WFP for Medical

Grade	Consultant	NCHD	Work Rota	Total
.	1 WTE	1.5 WTE	Working pattern to be decided	2.5

The main issue revolved around the consultant cover with some favouring one day “on” while others favoured a “hot” week when they would manage the unit for a full week. There were obvious benefits to both and the consultants were asked to go and consider both. It was agreed that PMAC would meet again in May/June for a full afternoon session to agree a new consultant rota and address issues relating to the implication for outpatient services etc. Therefore, while there were some issues relating to how it would be implemented in practice the change agents believes the objective with regard to successfully agreeing a governance structure was successful.

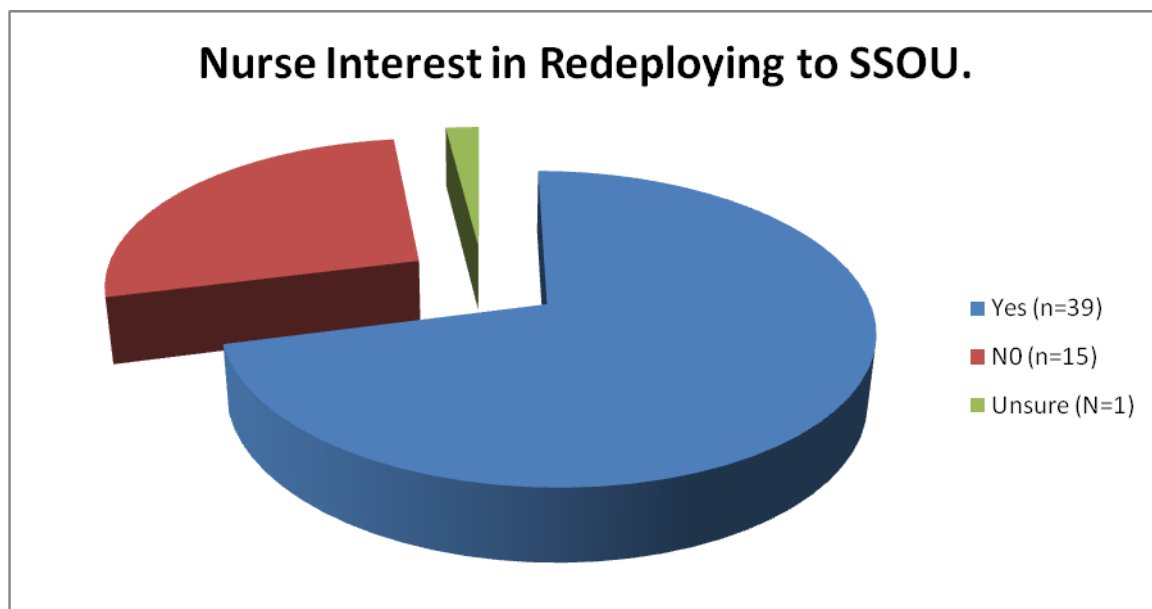
As part of the governance document it was agreed that the unit consultant would have his/her registrar roistered to the unit when they were on duty. This would allow for continuity of care and ensuring that the nursing staff would know what registrar was available for the unit.

Staff Engagement:

The unit open in 2014 and a survey was undertaken to ascertain the staffs viewpoint with regard to redeploying to the unit (Appendix 19). 73 surveys were sent out to staff with a response rate of 55 (75%) (Appendix 18). Of these 71% (N=39) expressed an interest in

being redeployed to this new unit, with 27% stating they did not (n=15) and 2% (n=1) were unsure. Of these 12 staff identified professional development and possible career opportunities as their reason (24%). While 22% (n=11) cited the new working hours as their main reason. Taking into account the workforce plan identified 4 nurses and 1 CNM is the staffing requirement having 39 nurses interested in redeploying is reassuring.

Figure . 3



A focus group was held with nursing management, it consisted of the lead ADON, two CNM3's and 2 ward CNM2's. Focus groups are seen as a means of gathering views, opinions and beliefs on a particular subject from a number of participants in a single sessions (Carney, 2000). No prior coaching was given to the group and they were informed that a number of open questions would be used to direct the discussion regarding the unit (Appendix 15). The change agent directed the group and used a "flip chart" to document issues, comments and suggestions as they were raised. The questions posed were used to direct the group but staff were free to add any additional comments that the questions may not have addressed.

The qualitative data from the focus group was analysed using thematic analysis; this involves developing themes from the focus group interview (Kitzinger, 1995). Prior to the meeting ending all the comments were grouped under six themes with the participants input:

- Medical Governance.
- Opening Times.
- Ward activity.
- Staffing redeployment.
- Psychiatric patients.
- Opportunities.

Of note the nurse managers concerns reflected those of the staff although they remained positive regarding the development. While there was a degree of apprehension regarding the future the nurse managers agreed it was a positive advancement for child care within the organisation.

This survey and focus group incorporates both qualitative and quantitative approach due to the recognition that a multi-method approach has been suggested for the health care field (Lazenbatt, 2002). The qualitative aspect collected data from the focus group and staff experience, attitude and reaction in the survey. The quantitative aspect emphasised the numerical expression regarding:

- interest in working in the unit (appendix 16),
- if the communication strategy had worked (appendix 18) and
- to identify concerns (see appendix 10).

Nurse management engagement and communication were critical throughout this project to ensure continued support for the unit.

4.3.3.5: Objective 5: Communicate clearly with all staff throughout all stages of development with regard to the SSOU. Identify concerns (real or imagined) with regard to this development.

A SSOU committee was established to represent the management structure within the organisation as previously discussed. Information was communicated to staff via the monthly PMAC and CNM meetings. Representatives were actively encouraged to provide feedback to their staff regarding the outcomes of the meetings.

Information folders regarding Observation Units were distributed to committee members and to all relevant departments, including the COO's office. A staff information board with relevant articles was placed in the staff tea room. The hospital's magazine distributed, via the hospital intranet, to all staff within the organisation, was also used to disseminate information regarding the OU development to a wider audience. Building development plans for the unit were displayed in ED and the tea room.

Service User Involvement

The local newspaper was also used to distributed information to the public and staff in the form of a naming competition for the unit (Dennehy, 2014a, 2014b) (Appendix 6). This not only encouraged local interest and participation but allowed for wider communication with regard to the development. Service user involvement is imply "*a process by which people are enabled to become actively and genuinely involved in defining the issues of concern to them*" (HSE, 2011). A total of 124 suggestions for the unit name was received, these were reduced to 23 by the SSOU committee. These names were then presented to 45 children attending ED

and the Outpatient to vote on indicating their first three preferences. “The Pod” won, it is an acronym for Paediatric Observation and Discharge Unit. The organisation has planned a Service User Engagement Day for the 28th of May 2014 when the agreed name will be publicised.

Staff Engagement:

A nursing survey was undertaken to assess whether staff believed that they were receiving timely and accurate information regarding the unit’s development. 55 staff responded to the survey given a response rate of 75%. Of these 71% (N= 39) responded that they were kept fully informed of the recent developments regarding this unit. However, if we review the theatre staff on its own only 57% (n=4) felt that they were communicated with sufficiently. The change agent realised that the communication with regard to this department was not as robust as it was with the wards. This was from a mistaken belief that staff from such a specialised department would not be as interested in redeploying. This survey identified this short coming on behalf of the change agent and was rectified as a result.

A nursing staff survey also assessed staff concerns with regard to the development. 40% (n= 22) of the staff expressed no concerns with regard to the development. 33 of the staff (60%) expressed a total of 56 concerns (Appendix 10). 25% of these concerns related to the unit reducing ward admissions with the possible result in ward closures. 15% (n=8) felt the unit times were not long enough to meet demand. 13% (n=7) had concerns with the availability of parking when starting at 10.00 and safety concerns regarding access to their car at such a late time (22.00). 9% (n=5) had concerns that this redeployment could leave the inpatient wards understaffed. Having identified the staffs concerns with regard to the opening of the unit it was possible to address these both with staff and management.

4.3.3.6: Objective 6: To agree the medical conditions to be treated in the SSOU.

A comprehensive literature review was undertaken as part of this project and the ten most common conditions treated were identified (Appendix 11). These conditions were compared against the inpatient profile of the organisation. It identified that the Average Length of Stay (LOS) for most children was 1.5 days (Appendix 9). This compared to an average LOS of 2.88 days for all other children treated in the hospital. These patient conditions were also compared against the Victorian Government Initiative (2009) with regard suitability for SSOU care.

Furthermore, they were benchmarked against a similar service within the UK (Salford, Manchester) during a recent site visit where our conditions were validated against their current OU population.

Benchmarking is a commonly used tool in healthcare to identify best practice. Gill (2011) states it requires asking three essential questions:

1. What tasks are we not going well?
2. Are others performing these tasks better than us?
3. Can we adapt these methods to improve our service or performance?

While some conditions, for example asthma, received full endorsement from the SSOU committee others required negotiation. In particular, accidental poisoning was not a condition that the medical consultants thought was suitable, however the literature suggested that this condition was extremely suitable. The change agent shared this documentation with the committee and the ED team stated that a high number of these patients are already being observed in ED it was agreed that they would be included. The ED consultants also wanted minor cellulitis and Head Injuries to be included however as these would not normally come under the care of medical consultants they were excluded. This was one of the reasons while

the ED consultants decided that they would like a more active role in the unit and as a result a shared governance consultant led approach was reached in the end. While there are other conditions that are considered suitable, for example allergic reactions, minor trauma, headaches and minor psychiatric illnesses it was agreed that to gain the fullest support, from the medical consultants, that they would be excluded at least initially.

The agreed list of patient medical conditions to be treated within the unit was included within the governance document (Appendix 11) and were approved by the PMAC Committee.

4.3.4 Product

Product evaluation identifies and assesses the outcome of the change, to assess whether it achieved what it set out to do (Zhang *et al.*, 2011). Frye and Hemmer (2012) state that there is a number of ways to assess the impact of a quality improvement: one of which is comparing it to similar studies and another one is the achievement of the objectives.

The literature review, in Chapter 2, would support the aim of commissioning of a SSOU which has been demonstrated international to be a viable alternative to inpatient care for certain medical conditions (Ogilvie, 2005).

Objective 1, the formation of an interprofessional SSOU committee with regard to assist in the commissioning of the unit have been met and were discussed earlier in this chapter. Objectives 2 (Governance) and Objective 6 (suitable medical conditions) were endorsed in the SSOU this document and ratified by PMAC and therefore are evaluated has been met. The equipment required and financial approval for purchasing has been secured through the building fund provided by the HSE and additional funding has been secured from fundraising therefore objective 3 has been achieved. Nurse management, consultants and clerical have

been actively engaged with regard to staffing levels and agreement has been reached. Staff support with regard to redeploying to this unit has been surveyed and was demonstrated to be very positive therefore objective 4 has been realised. A survey of nursing staff established that 69% felt that they had been kept fully informed with regard to the units development and therefore objective 5 was considered as been achieved.

While it was not possible to evaluate how the unit might improve and effect the service delivery in the ED as it was not currently operational. These metrics should include: ED waiting times, admission diagnosis, LOS, parental satisfaction, conversion rate to inpatient admission, readmission rate and cost savings (Napolitano & Saini). An evaluation tool based on and the Victorian Government “*o b s e r v a t i o - a s s e s s m e n t t o o l*” (2009) was *e l f* devised so evaluate the units success once operational and ED Compstat Data will also be monitored as mentioned earlier (Appendix 17).

4.4 Conclusion

This chapter outlined the evaluation of this change project using the CIPP model of evaluation. The aim and objectives as described under the four headings of CIPP as set out in the beginning of this project have been achieved.

While staff have several concerns regarding this unit there is also support as by evidenced the staff nurses, nurse management and consultants support. For management this will provide a solid base for its introduction within the organisation. In order to function optimally, it is important that this new model of care include a new governance structure to ensure proactive assessment and management of patient needs. In addition, there is now evidence of staff engagement and support in favour of implementing this new model of care.

While for assignment purposes this project might be completed the journey continues towards implementation of a SSOU within the organisation. The unit has been commissioned with a proposed opening date of mid October 2014. The resources, both human and material, are available. There is a commitment from management, staff and the Children's Hospital Group to ensure this unit will be the model for all future units y children to come.

Chapter 5: Discussion and Conclusions

5.1 Introduction

This change initiative involved the commissioning of a Short Stay Observation Unit (SSOU) within a DATH's hospital. The development of a new governance structure through a shared care model was central to this process. Significant benefits for the child and parent have been identified however it requires staff to change their "way of doing things". This organisational cultural change as we have seen can be difficult. These benefits, which include increased parental satisfaction, cost savings for the parents and the hospital through reduced LOS are discussed. Opportunities for staff development were also identified which was reflected through the extremely positive staff survey conducted. Finally, the strengths and limitations of the study are identified and recommendations for hospital management are highlighted.

5.2 Implications for the change

Adult Observations Units in the form of CDU's are common place among many adult hospitals (HSE, 2012) however this has not been reflected in our children's hospital in Ireland. BAEM (1989) recommend that all ED's should have short stay beds for every 5,000 attendees. The three children's hospitals, in Dublin, combined saw 113,703 children in 2013 within their ED's however none of them have a dedicated OU. Recent publications have highlighted that OU's are central to the proposed new National Model of Care for Paediatric Healthcare in Ireland (NPHDB, 2010) and the New Children's Hospital (St.James's) and its two satellite units (CHGB, 2014). The projected activity for the New Children's Hospital and its satellites for 2021 is 110,300. (RKW, 2007) Therefore, this change project may have wider implications than just within this organisation.

5.2.1 Culture

It quickly became apparent that this initiative was not merely about developing an OU. It reflected a more fundamental change with regard to how we deliver patient care and therefore required a deeper cultural change. Culture has many positive aspects in that it conveys identity, facilitates commitment, encourages stability and organisational success (Kearns, 2005). However, it runs the risk of impeding the process of transformation that is required for organisations to adapt to changing circumstances (Schein, 2009). The acceptance of a new model of care, observational medicine, required staff to let go of things valued and accept this alternative to inpatient care. Anxieties and concerns were identified early on in the project and addressed using several modes of communication. (Appendix 5). The process of constant communication throughout this project to all stakeholders and interested groups reduced the risk of resistance and increased the sense of ownership by all staff. This was evidenced with 71% (n=39) of nurses stating that they were kept fully informed at all stages of the project.

Several members of the SSOU team visited a unit in the UK. Following which the team members had a greater understanding and vision of what the unit could become. The enthusiasm and credibility of the team members', following the visit, also helped with securing a successful outcome. An earlier visit would have made the team members more credible to staff as they communicated this new vision.

Despite the initiative been driven from "top down" the change agent led the project with enthusiasm and credibility while encouraging others to follow (Kavanagh & Ashkanasy, 2006). This can be difficult for the change agent due to the forced nature of the change. However, the change agent firmly believed that in light of its future implications for paediatric healthcare it was vital that we grasped this opportunity to lead nationally on a new model of care. Ford *et al.*, (2008), state that change agents should communicate regularly and

enthusiastically and what they communicate has to be truthful, realistic and accurate. The implications for the organisation and staff are that this new model of care will affect inpatient activity and will result in bed closures and staff redeployment. However, presenting the staff with relevant literature and linking it closely with the New National Model of Care for Paediatrics and the new National Children's Hospital greatly increased the support for the project.

5.2.2 Parental satisfaction

Patient centred care is very much to the forefront in Irish healthcare at present (HSE, 2013). Patient satisfaction and ED experience has been highlighted as a key indicator for the overall patient experience (HSE, 2009). In the paediatric setting parents are generally assessed in regard to the patient experience. The literature review supports the view that parents favour OU care over traditional inpatient care (Ogilvie, 2005). Paediatric acute illnesses respond well to short stay medicine, as they generally have no major pre-existing comorbidities and due to the fact they generally have an adult carer at home (Hopper *et al.*, 2008). Short stay unplanned admissions are expensive (both to the hospital and parents), place a strain on healthcare resources, are disruptive to families and expose children to unnecessary risks (Saxena *et al.*, 2009). Traditional inpatient care delivers provider centric healthcare, with a focus on operating at the convenience of the provider rather than the patient (Battles, 2006). The OU with its clear patient care pathways and consultant led delivery is patient centric. Strong consultant leadership is important for OU success and improved patient outcomes. (ACEP, 2011) It is for these reasons that parent's satisfaction was deemed higher with regard to OU care over inpatient care (Baugh *et al.*, 2011). Therefore in light of recent governmental emphasis on patient centred care and their experience (HIQA, 2012: HSE 2009, 2013) hospitals should look at this alternative to inpatient care.

5.2.3 Financial Implications

Developing a SSOU has financial implications with regard to the build and equipping the unit. The HSE provided the funding with the fundraising department providing additional funding. The literature review supports the assertion that OU are more economical than standard care (Hassan, 2003) and are a better match for resources (Wiley, 2001). An active observation programme therefore can lower the risk of malpractice by reducing the physician's chance of inadvertently sending home a child with a serious life threatening condition (Zebrack et al., 2005). Thus providing physicians with an alternative to either admission or discharge home scenarios (Baugh et al., 2011).

OU's can contribute to cost savings with more patients being treated efficiently in dedicated units leading to early treatment and discharge. This allows for more patients to be treated within the hospital with the same number of beds (Baugh, 2011). This potential has been assessed in this project with the possibility of 2,418 bed days saved per annum (Appendix 22).

Parents can experience substantial financial burdens with prolonged inpatient care of their child. These costs relate both to their hospital stay and with regard to taking time off work (Miescier et al., 2005). Reducing the hospital stay of their child therefore can help reduce this financial burden (Fieldston et al., 2013).

The development of OU's in the US has been controversial with regard to government and private insurance reimbursement with regard to hospital costs (Mace *et al.*; Macy *et al.*, 2010). For reimbursement to occur OU beds have to be designated as inpatient beds as opposed to ED trollies or outpatient services (Fieldston et al., 2013). This may have serious

implications for a hospital, as without proper bed designation, activity levels will not be accurately captured and therefore the necessary funding will not result. Similarly, if private insurance companies do not recognise this new bed designation it will not be possible to recoup this necessary additional income. This additional income is vital for most hospitals to stay within their hospital budget as set down by the HSE. With this project, inpatient ward beds are to be closed so that these unit beds can be opened, therefore the hospital bed quota will not be affected. To secure the appropriate funding it is necessary to have the correct bed designation.

5.2.4 Governance

Traditionally EM physicians have managed OU's but recent trends in the US reveal that only 56% now do so (Wiler *et al.*, 2011) while medical consultants now manage or co-manage such units (RCPCH, 2009). Having co-managed units can lead to unique opportunities with the possibility of extending the conditions typically seen in OU's (Napolitano and Saini, 2014). It may also lead to a more streamlined efficient admission system from the emergency department. It is for these reasons that a shared governance approach was agreed for this unit. However, for the unit to function efficiently it is necessary to have clear patient care pathways directed by the consultant. Having these time oriented care pathways (less than six hours) ensures that all practitioners have a shared understanding with regard to LOS and a model of care. As the number of conditions deemed suitable for care in the unit is limited it is believed that through repetition the team can provide a safe, efficient and standardised approach to the care provided to the child. These conditions will be reviewed in six months post opening.

As the child's stay is expected to be of a short duration any diagnostic tests or speciality consults (e.g. nurse specialist or allied health) require prior action by these teams. Close

liaison and communication with these teams is therefore vital while developing such a unit. During this project Allied Health, Nurse Specialists and diagnostic services were kept fully informed of all developments.

5.3 Strengths and limitations

The strength of this change project can be attributed to the commitment of the SSOU committee and to that of the staff. Although a major change in the way we will deliver care, staff came to understand that it reflects the future model of care for Paediatric Healthcare in Ireland. While recognising that there are anxieties with implementing such a new model of care staff have been very open to its development, with many seeing it as a unique opportunity for their career development.

There were several limitations with the main one being that the unit was not operational at the time of completion of this project. Therefore, the full implications cannot be fully understood at this time. To ensure its continued development the SSOU broaden the TOR to continue in an operational role following its opening. This would allow the committee to support unit through its initial stage of development and mainstreaming within the organisation. An audit function was also added to the TOR to ensure that the unit provides patient centred quality time bound care.

Secondly, although financial support has been agreed for the project it has not be drawn down as was not appropriate at this stage of the project.

Thirdly, no literature with regard to financial saving of such units within Ireland was identified during the literature review. Therefore, potential cost savings as seen in the UK and

the US may not be reflected here. However, indications from this study would suggest that it is indeed possible with reduced LOS being achieved.

Fourthly, the change agent while working closely with PMAC did not actively engaged the consultants outside of this forum. The change agent delegated this task to the three consultants who were part of the SSOU committee. This resulted in a lack of communication with regard to the development which in turn reduced their support. Their concerns mirrored those of nursing and nurse management although they were not addressed in a timely fashion. This led to prolonged discussions with regard to the governance document. If this project was to be undertaken again this issue would be targeted as a priority and consultants actively engaged in a staff survey or focus group. A communication strategy to communicate with this group would be also devised as due to their work commitments it can be difficult to meet them as a group.

Fifthly, it is acknowledged that observational medicine is occurring in the ED however, this has never been quantified. These patients are currently recorded as ED attendees only but ED staff suggest that four to eight patients are observed in the unit daily. This will obviously affect the SSOU's ability to reduce inpatient admissions. It was only towards the end of the project that the change agent recognised that this data would be useful in gauging the effectiveness of the SSOU. Due to staff shortages in the ED it was not possible to gain staff commitment to audit this activity at this stage.

5.4 Recommendations

Based on the lessons learnt from this implementation and following a comprehensive literature review the following recommendations to hospital management are made for future improvements:

1. Identify the current number of patients being observed in the ED that would have been better served in an SSOU.
2. ED overcrowding is an important marker for patient safety (Sinclair, 2007). Identifying suitable conditions for treatment in an OU may be possible at the Triage Stage in ED. By fast-tracking these patients directly to the OU it can streamline the delivery of care, reduce ED pressures and reduce the workload regarding patient handover from ED to OU staff. Zebrack *et al.*, (2005) identified that 7% of the OU patients were admitted directly to the unit without an ED evaluation. This is an area that the hospital should explore once the unit is operational.
3. The initial opening hours are 10.00-22.00, Monday to Friday, will have to be audited closely. These opening hours may very well have to be adjusted to reflect patient needs.
4. On a recent visit to a unit in the UK (Salford, Manchester) Advanced Nurse Practitioners (ANP) were a key factor attributed to the success of the unit. It is therefore recommended that nurse management look at this model with the view to supporting such career pathways for its nursing staff within the unit.
5. Paediatric OU's have a seasonal variance reflecting the seasonal variation in childhood illnesses (Mace, 2001). This often means they are busier in the winter with the inherent respiratory conditions that occur during this period. The unit also tends to be busier as the day progresses with evenings being their busiest times (Sinclair,

2007). Hybrid units have been developed to utilise the quieter mornings as a result. Certain conditions, for example post procedure sedation and day cases, may be suitable for treatment in these units during identified quieter times. Therefore, it is recommended that the unit be audited once it is operational to identify the possibility of extending its role.

6. A site visit to Salford was undertaken as part of this project. Unfortunately, it was undertaken towards the end of the project. It is recommended that any organisation introducing a similar project conduct a site visit at the beginning of the project as it enables a clearer vision, understanding and credibility with regard to change being undertaken.

5.5 Conclusion

The development of a children's OU is very much in line with current international trends and reflects developments in the adult sector. While the trigger for the change was the Minister of Health and the HSE it is heavily supported by current literature and developments within paediatric services in Ireland.

The SSOU committee engagement ensured a successful outcome. Their initial fears and anxieties expressed at the first meeting allowed the change agent to address these issues when dealing with the larger staffing population. Interestingly, while 60% of the staff still had some concerns with regard to the unit, 71% (n=39) were interested in working there. The success of the project was due to the constant communication of the vision of this new unit. For management, the nursing staff interest in working in the unit should facilitate an easy transition with regard to staff redeployment.

The literature supports the view that OU's reduce length of hospital stay (LOS), hospital costs and increase parental satisfaction. They are embedded in the proposed National Model of Care for Paediatric Healthcare in Ireland (NPHDB, 2010) and the New Children's Hospital (CHGB, 2014). Therefore, this development not only has implications for this organisation but for paediatric healthcare within Ireland.

The change project involved the implementation of an Observation Unit (OU) within a Dublin Academic Teaching Hospital (DATH). While the building of the unit was delayed all the key objectives with regard to its development were achieved. The literature review identified four key benefits for the establishment of such a unit which were discussed in detail. With the aid of the HSE Change Model (2008), the change process was described in detail. The use of the HSE change model helped with managing the process and ensured that the momentum continued despite the delays with regard to building of the unit itself. The change project was then evaluated against the objectives as set out in this chapter one. Finally, the discussion chapter reviewed findings from the project as it relates to the literature, the authors experience and made recommendations for future improvements.

In conclusion the underlying assumption of this project *"is that patient care comes first and that an optimal observation unit is designed to prioritise serving patients and not management or finance concerns"* (Baugh *et al.*, 2011, page 34).

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Appendix 1: Unit Models

Location	Governance
<ul style="list-style-type: none"> Located beside ED. 	Governed by ED paediatric consultants (ACEP, 2011; CEHSEU, 2004; Cooke <i>et al.</i> , 2003; Macey <i>et al.</i> , 2010; Ross <i>et al.</i> , 2010; Victorian, 2009).
<ul style="list-style-type: none"> Located beside ED. 	Governed by paediatric medical and ED consultants (CEM, 2008; RCPCH, 2009).
<ul style="list-style-type: none"> Co-located on a children's ward. 	Governed by paediatric consultants (Cooke <i>et al.</i> , 2003; Kibirige <i>et al.</i> , 2003; Napolitano and Saini, 2014).
<ul style="list-style-type: none"> Combined ED units in which children and adults are treated. 	Governed by adult ED teams with/without the assistance of paediatricians (Mace, 2009). The disadvantage of this unit is the additional training required for all staff to ensure they can provide the appropriate care for the children attending (Mace, 2001).
Hybrid Units, often located beside ED.	Governed by paediatric medical and ED consultants however allow direct admissions by sub specialties to the unit, for example for elective treatments. One advantage of this type of unit is that it smoothes out the seasonal and daily variability that is generally seen in the paediatric population (Mace, 2001) 2001; Zebrack, Kadish, & Nelson, 2005)

Appendix 2

References supporting conditions cared for in Paediatric Observation Units

Authors	Asthma	Abdominal Pain	Croup	Dehydration	Fever	Gastroenteritis	Minor Head Injury	Pneumonia	Poisoning	Seizures
Alpern <i>et al.</i> , (2009)	◊		◊	◊		◊				
Blair <i>et al.</i> , (2008)				◊			◊			
Callello <i>et al.</i> , (2009)								◊		
Connors <i>et al.</i> , (2012)	◊	◊		◊	◊	◊	◊	◊		
Coon <i>et al.</i> , (2012)	◊			◊	◊		◊			
Crocetti <i>et al.</i> , (2004)	◊		◊		◊		◊			
Greenburg <i>et al.</i> , (2006)		◊								
Holsti <i>et al.</i> , (2005)						◊				
Hopper <i>et al.</i> (2008)	◊	◊	◊		◊		◊			
Mace (2001)	◊	◊	◊	◊	◊		◊	◊		
Macy <i>et al.</i> , (2010)	◊	◊	◊	◊	◊	◊	◊	◊	◊	
Mahajan <i>et al.</i> , (2013)		◊		◊	◊		◊	◊	◊	
McConnochie <i>et al.</i> , (1999)			◊							
Mallory <i>et al.</i> , (2006)					◊					
Miescier <i>et al.</i> , (2005)	◊		◊							
Najaf-Zadeh <i>et al.</i> , (2011)			◊	◊	◊	◊	◊	◊	◊	
RCPCH (2009)	◊	◊	◊	◊	◊	◊	◊	◊	◊	
Rentz <i>et al.</i> , (2004)		◊	◊		◊	◊				
Scribano <i>et al.</i> , (2001)	◊		◊	◊	◊			◊	◊	
Silvestri and McDaniel-Yakscoe (2005)	◊	◊	◊	◊	◊	◊	◊	◊	◊	
Sinclair (2007)	◊	◊		◊	◊	◊		◊	◊	
Wiley (2001)	◊		◊	◊				◊	◊	
Zebrack <i>et al.</i> , (2005)	◊	◊	◊	◊	◊	◊	◊	◊	◊	

Appendix 3: Terms of Reference

Terms of Reference (TOR) for Short Stay Observation Unit Operations Committee.

Committee commissioned by: Clinical Director.

Chairperson: xxx

Membership

- xxx (Business Manager).
- xxx (Medical consultant).
- *xxx (PEM consultant).
- xxx and xxx (Nursing Management).
- xxx (Clerical).
- xxx (Finance).

* or nominee

Accountability

The committee is operationally accountable to the Executive Management Team through the Clinical Director of Paediatrics and PMAC.

Level of Authority:

Decision making ability however the team will also report to PMAC for ratification of any guidelines/policies. CEO/COO will be kept informed

Purpose

To facilitate the development of a Children's SSOU in Tallaght Hospital.

Quorum

The quorum necessary for transaction of business shall be 50% of members of the committee.

Frequency of meetings

Meetings will take place on a monthly basis or more regularly if decisions are required.

Responsibilities and Duties

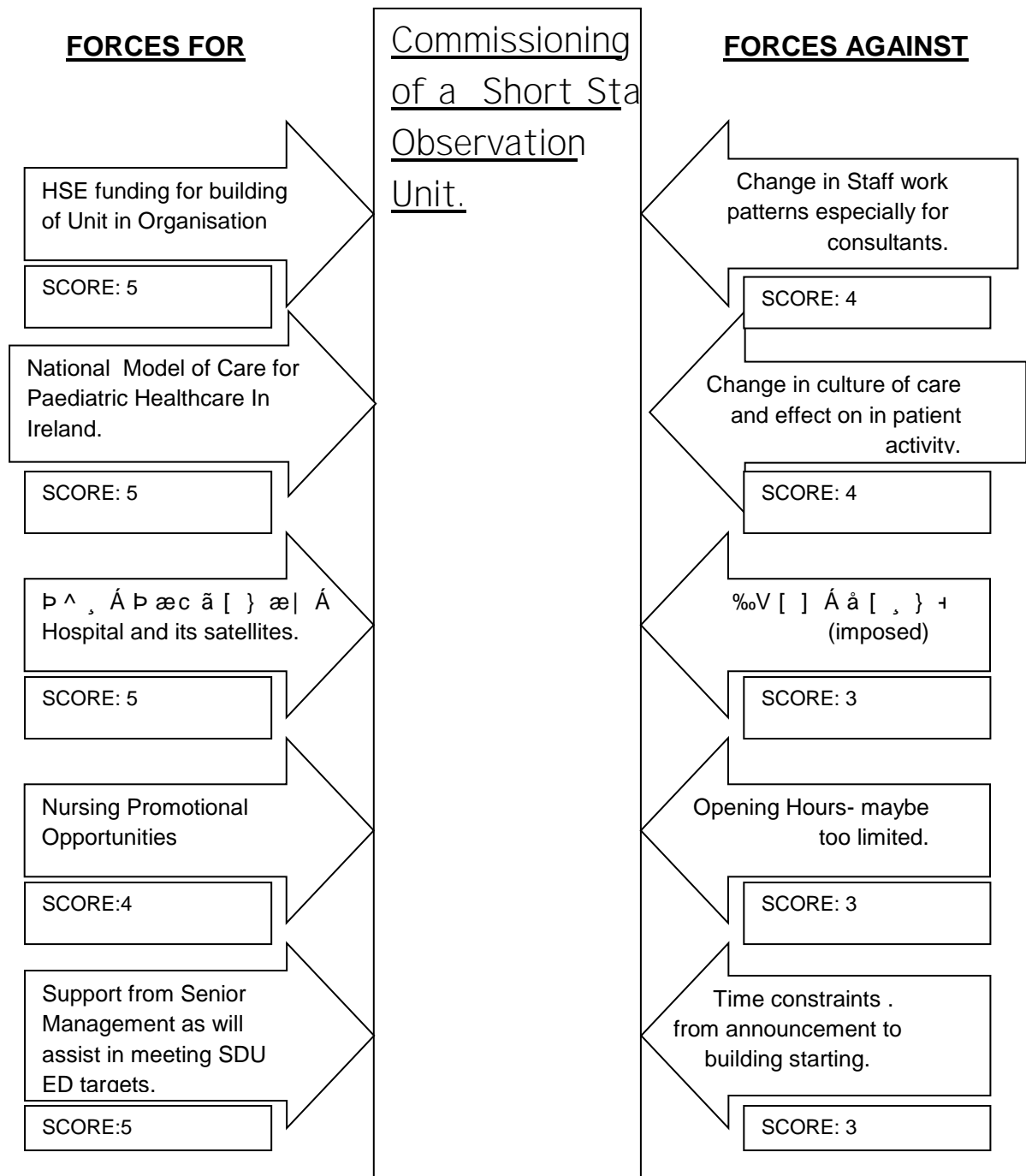
1. Develop a governance structure (model of care) for the Paediatric SSOU.
2. To agree care pathways for patients attending the unit.
3. Identify and advise hospital management on staffing requirements for the unit (Nursing, NCHD and Ancillary staff).
4. Identify equipment requirements for the unit and work with the hospital to purchase same.
5. Communicate clearly with all staff throughout all stages of the development.
6. Keep the executive management team (paediatric directorate) up to date on the status of the project and inform the COO/CEO of any significant issues that might compromise patient safety or cause disruption to patient.
7. To build in audit processes for this new development.

Review of Terms of Reference

The Terms of Reference to be reviewed on an annual basis.

Appendix 4 Force Field Analysis

Force Field Analysis



Total Score For 24

Total Score Against 17.

Each driver was assigned a weighting from 1-5, with 5 being the most forceful. Many of the forces for the change were given a 5 weighting as the change agent deemed them to be very strong with regard to the future of the current organisation. It is planned that this organisation will in 2016 become a satellite unit with only an ED, Observation Unit and an Outpatient Department. Therefore, this change in many ways is the future of this organisation.

Appendix 5 Communication Strategy

Who?	What?	How?	When?	Outcome?
Consultants. Nursing Staff. Ancillary Staff. EMT. Whole Hospital. Local Community. COO. Steering Group for Build.	<p>Communicate SSOU development in our hospital.</p> <p>Outlines of our project: e.g. Number of beds, opening hours, conditions to be treated, governance structure etc.</p> <p>In line with current HSE/DOHC guidelines.</p> <p>In line with current international trends.</p> <p>In line with new National Children's Hospital and its satellites.</p> <p>Benefits to patient and families.</p> <p>Opportunities for staff.</p>	<p>"Le Cheile"- internal hospital on line publication.</p> <p>Building Plans on wall in Children's ED waiting area.</p> <p>CNM Meetings.</p> <p>PMAC Meetings.</p> <p>Directorate Meetings. (weekly)</p> <p>Staff Notice Board. (updated regularly).</p> <p>Staff Information Folder (staff team room and outlying departments- updated regularly).</p> <p>Local paper (information on development and naming competition for unit).</p> <p>COO/Steering Group.</p>	<p>"Le Cheile" – February/March Edition.</p> <p>Building details in place from outset.</p> <p>Monthly.</p> <p>Monthly.</p> <p>Weekly.</p> <p>In place from October- updated regularly.</p> <p>In place from October- updated regularly.</p> <p>March 2014.</p> <p>Weekly Business Managers Meeting.</p>	<p>Feedback has been received from personal contact made to team members- communicated back to SSOU team at monthly meetings.</p> <p>Feedback from internal hospital meetings via representatives on those teams.</p> <p>Survey of staff views/attitudes undertaken in February/March- reviewed and fed back to SSOU team.</p> <p>Unit naming competition reviewed by SSOU team.</p>

Short Stay Observation Unit will benefit young patients

Community invited to name new unit in Tallaght

By Mary Denny
mary.denny@tallaght.ie

IRELAND'S first dedicated paediatric Short Stay Observation Unit is currently under construction at the new Children's Hospital, Tallaght - and the community is invited to celebrate the construction by naming the new unit.

The eight-bed Short Stay Observation Unit (SSOU) is separate to the current Ambulatory Care Unit being delivered as part of the new National Children's Hospital at St James's - with the new unit being built alongside Tallaght Hospital's adult A&E expansion.

According to Eoin Power, Business Manager Paediatric Directorate at Tallaght Hospital, the SSOU is a facility within which children with acute illness or injuries can be assessed, observed and treated without being admitted as an inpatient. Currently, children requiring further assessment are referred to wards, which results in long periods of stay due to individual ward processes.

Mr Power said: "This unit will provide young patients who need further observation but not admission, with the chance of being sent for



DEDICATED: Eoin Power, Business Manager Paediatric Directorate at Tallaght Hospital, Marian Nolan, Stanley Koo, and Rincy Koshy

in a comfortable place - A&E department and/or the prospect of being moved to a ward. Moving a child to the unit will also reduce a waiting time.

"The introduction of a new admission to hospital unit is crucial to the success of the service and the new unit will provide a valuable service to the community. It is a pleasure to have the community involved in the naming of the new unit."

Photos by Paddy Barrett



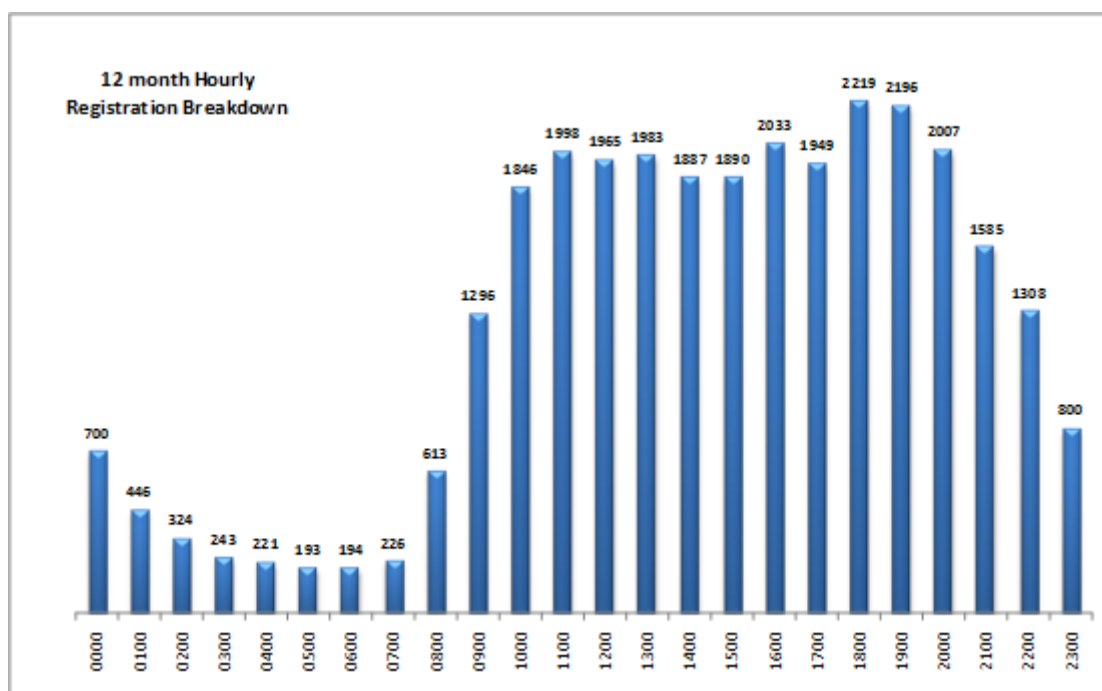
CONSTRUCTION: Work started on the SSOU

Observations, a relative's time with current international friends (and it is also very much in line with the proposed model of Care for the new Children's Hospital at St James's and its two satellite laboratories (each with a dedicated radiology suite) at Tallaght and Blanchardstown).

"Although staff from a purpose built SSOU are being recruited to their respective departments, the SSOU staff at the National Children's Hospital are training members of the community to name the new unit - with the person behind the chosen name winning a Samsung Galaxy Tab3.

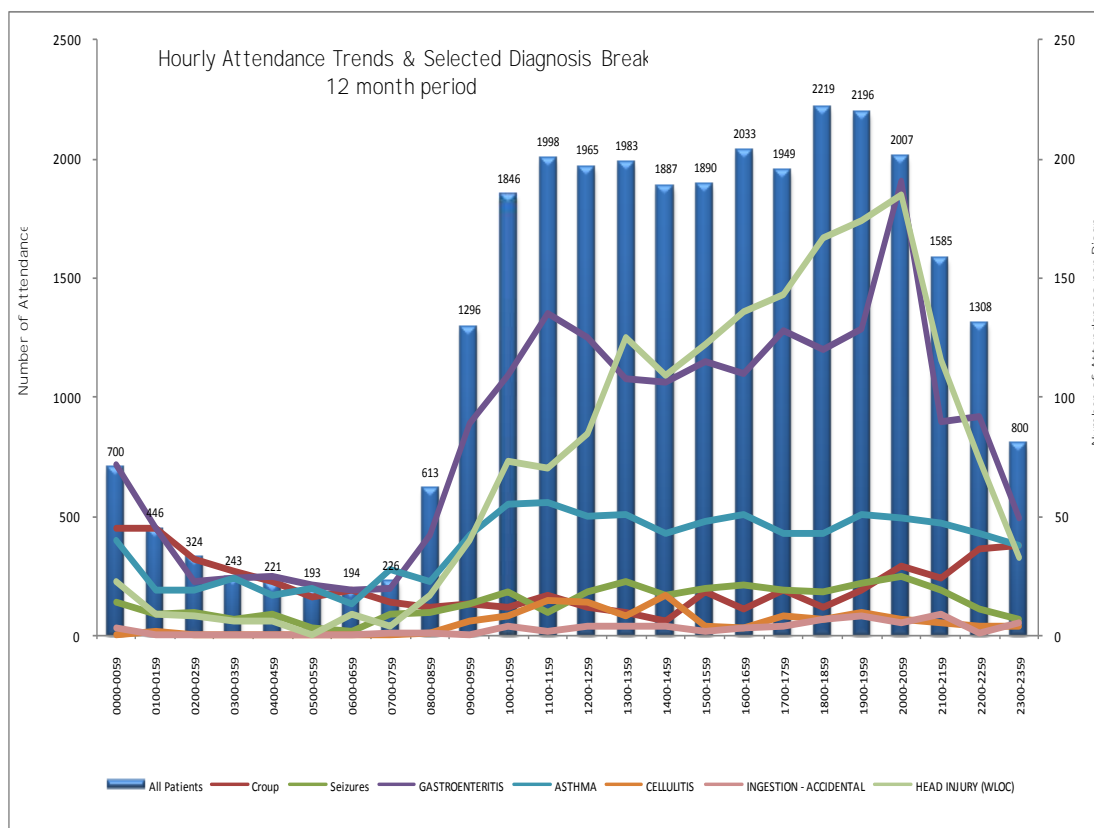
These are no restrictions on the name, people can look in any area for inspiration such as local history, the area, or even a famous person. The winning name will be announced on the 15 April 2015. It is anticipated that the new unit will be open by late autumn.

Appendix 7: Registration Times in the Children's Emergency Department.

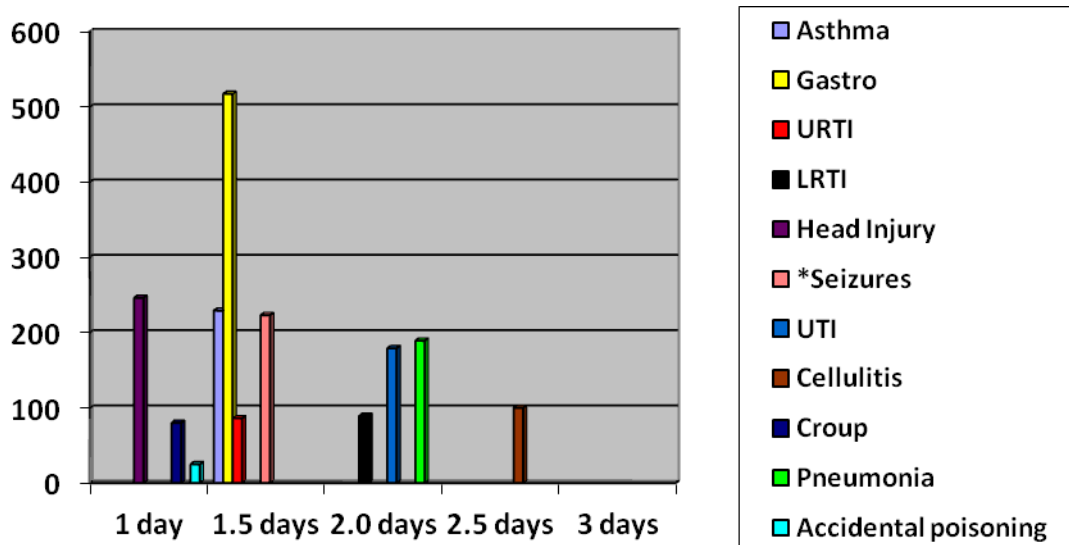


The following graph indicates our peak activity in the Paediatric Emergency Department for 2012. This pattern is not unique to this organisation as Paediatric Emergency medicine is renowned for being an 'after dinner speciality'. This is the time when we have our maximum resources in place and would indicate that a SSOU could function most efficiently between the hours of 10am to 10 pm.

Appendix 8: Registration Times for Specific Conditions (2012)



Appendix 9: Inpatient Conditions 2013.



Asthma 229

Gastroenteritis 517

URTI 86

LRTI 84

Head Injury 246

* Seizures 223 (excludes children with a diagnosis of epilepsy)

UTI 179

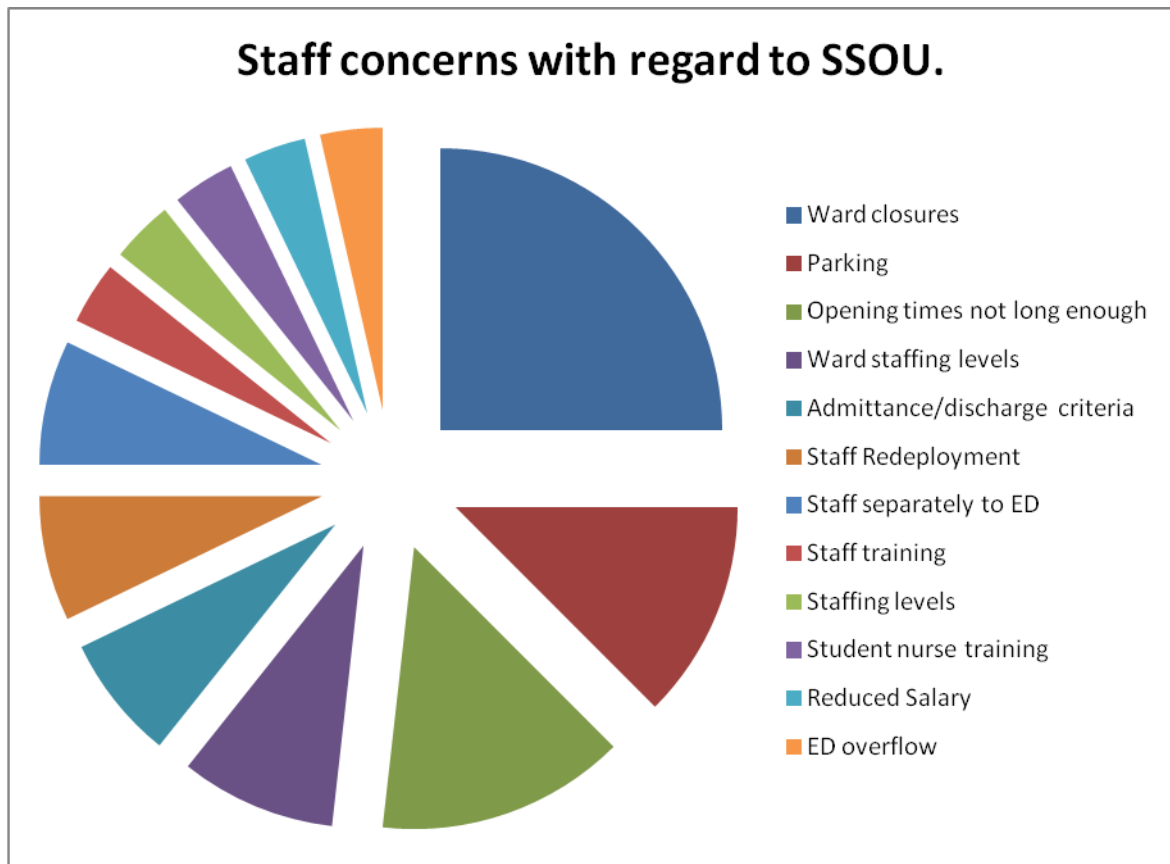
Cellulitis 56

Croup 80

Pneumonia 189

Accidental Poisoning 25

Appendix 10: Staff Nurses Concerns.



60% (n=33) of the staff nurses who responded expressed some concerns regarding the development. Some of the staff expressed more the one concern and in total 56 concerns were expressed.

Appendix 11

Short Stay Observation Unit (SSOU) Governance Document.

Introduction

- The SSOU is an 8 bedded in patient facility, adjacent to the Paediatric ED that provides for a short period of observation, assessment and/or treatment for children.
- The purpose of the SSOU is to make safe clinical decisions on a patient who presents to ED and whose maximum length of stay (LOS) in the SSOU is likely to be no longer than 6 hours.
- No patients will be admitted into the unit after 18.00.
- Patients will fall into 1 of the following 3 categories:
 1. A period of observation.
 2. An investigation, the results of which will determine whether the child is likely to be admitted or discharged.
 3. A short course of therapy to treat defined conditions after which the child will be discharged.

Opening Hours

It is proposed that this unit will open Monday to Friday between 10.00hrs -22.00hrs, with the last patient being admitted at 18.00. The unit will be closed to admissions at weekends and Bank Holidays.

Admissions

- All admission to the SSOU must be agreed with the EM consultant.
- Once a decision to admit a patient to the unit is made the designated Consultant or Registrar will be informed. To ensure a smooth and efficient service this should be undertaken within 30 minutes of the decision to admit.
- All medical patients in the SSOU are admitted under the In-House Consultant of that day.
- The unit should not be used to admit non SSOU patients.
- It is envisaged that there will be a minimum of 2 consultant led rounds, one early afternoon and one again later in the evening, to decide on which patients are suitable for discharge or admission. Additional ward rounds will be at the consultant's discretion.
- A designated registrar will be allocated and available daily for the unit.
- All patients admitted to the unit must have a full admission by the NCHD allocated to the unit.
- Patients admitted to the unit will follow defined clinical pathways where available.

Typical Conditions suitable for SSOU

1. Asthma.
2. Dehydration/gastroenteritis.
3. Croup
4. Pneumonia/Upper respiratory Tract infection.
5. Minor Head Injury (under the care of PEM).
6. Seizure, to include first and febrile seizures.
7. UTI.
8. Accidental Ingestions.

Staffing

Nursing:

- The SSOU nursing care is under the direct responsibility of the CNM3 in charge of the Children's ED.
- The responsibility for the day to day care and nursing management of the unit is allocated to the appropriate CNM2 in the unit.
- A health care attendant will be available on each shift.
- The nurse to patient ratio is 2:8 given the potential rapid turnover within the unit.
- ANP and CNS's input will be available on request.
- The unit liaison nurse will coordinate follow up as required.

Ancillary Staff:

- Psychiatry liaison and social work, pharmacist input is available as required.
- Phlebotomy will provide a service on request.
- Clerical support will be assigned.
- Portering from the main hospital pool will be used.

Medical:

- A minimum of two ward rounds will be conducted by the medical Consultant on call for the day. The NCHD must accompany the consultant on the round to facilitate and action the management plan.
- Some children will remain under the care of the PEM consultant.

Admission Process:

- Following a decision to admit to the unit, all ED records will be printed and placed in the patient's medical record.
- The unit clerk will maintain the charts and file any results and letters.
- All patients will be entered on the iPIMS system as per in-patient status.

Discharge from SSOU:

Once a patient has been identified for discharge the TEAMS discharge summary is completed by the registrar. Discharge options include;

- Discharge back to GP or given an appointment in OPD.
- Admitted to ward under the consultant on call.

In the case of a sudden deterioration in the child the EM team are available

Appendix 12: Implementation Plan/Project Plan

Overview

Implementation Details

What:

- Governance Structure – Medics, Nursing, Clerical.
- Workforce planning for staff level, business case for additional staff.
- Agreement with regard to Suitable Conditions for SSOU.
- Clinical Guidelines/Pathways.
- Bed Resignation (for unit).
- Equipment required and securing funds for same.

Who:

- **Governance/ Workforce**
 - Medics – xxx
 - Nursing- xxx and xxx
 - Clerical- xxx
- **Conditions** – SSOU Team.
- **Clinical Guidelines/Pathways-** nominated consultants, nursing and Nurse Practice Development
- **Bed Designation** – COO/EMT.
- **Equipment**
 - Equipment List – SSOU team.
 - Securing Finance- xxx and xxx.

Time Frame:

- **Bed Designation –July/August 2014 – xxx/COO**
- **Equipment – List march, purchasing August/September 2014**

Risks for Implementation: staff survey March 2014. PMAC meeting February 2014.

Communication and Engagement: ongoing – change agent

Appendix 13

Work Force Planning

The most common objective of work force planning is to ensure a balance between the demand for staff and their supply (Imision, Buchanand Xavier, 2009). This requires estimating future demands on staff within the service while ensuring the availability (but not excessive) of appropriate qualified staff to meet the demand.

The Unit Opening hours are from 10.00-22.00 five days a week. To cover this work pattern two 12 nurses working 12 hour shifts along with a CNM2 working 7.5 hours per day equating to 31 hours per shift. This is calculated as 155 per week which requires a 22% uplift (for annual leave, study leave etc) giving a total of 189.1 hours per week. These hours are divided by the working week of 39 hours indicating a staffing level of 4.8 staff is required to manage this unit. Multipliers can be used to allow for acuity and dependency measurement, as these patient were careful selected for treatment in this unit the dependant level is considered to be Level 0. Therefore, no multiplier was used for that reason.

Table

Grade	CNM2	Registered Children's Nurse	Health Care Assistant (HCA's)	Total
WTW	1	4	2	7
Working Shift	10.00-18.30 (7.8 hours)	10.00-22.00 (11 hours)	10.00-22.00 (11 hours)	
Grade Mix	14%	57.5%	28.5%	100%

However, what was taken into account was geographical layout (lack of visibility to ED for break cover), patient turnover, new service and audit capacity. Also taking into account the 20% of the CNM's "shift is spent on managing workload" (Shelford, 2013). Initially it is expected that this role will be bigger than the 20% indicated above due to the new service aspect. It is also envisaged that the CNM2 will develop a partnership approach with Salford Hospital in Manchester to assist in its development. Key to this will be monitoring patient outcome and KPI's, policy development and staff education as well as a staffing level review after six months. Student nurses both undergraduate and post graduate will also rotate through the service.

The Non Consultant Hospital Doctor (NCHD) cover for the unit will come from existing NCHD levels. It is envisaged that this NCHD will work closely with the consultant on call for the unit that day. For the Unit to be covered for the sixty hours requires 1.5 NCHD's however it is planned to incorporate this into the on call rota. At present the consultants are reviewing these rota's. Some are recommending a "hot week" where the consultant covers both the unit and ward but no night call, others are suggesting the unit cover be linked to their call. A meeting in mid-June is planned to discuss these operational issues.

Clerical services have indicated that an additional 0.5 WTE is required to facilitate this new service. This was incorporated into a business case for a ward clerk (Appendix 18) and it was approved by the "Manpower Approval Process" (MAP) and this post is currently being advertised.

At present the children's wards do not have HCA's however it is hoped to recruit two HCA I interns with FETAC qualification. The ED has a 0.5 HCA and her duties include: ordering stock, cleaning, ordering and delivering food to patients and hand hygiene audits. As this is new service and in many ways the pilot for the new National Children's Hospital (NCH) and

its satellites it is hoped to capitalise on this. As hospital management and the CEO of the new NCH are keen for it to succeed it is hoped to get approval for these HCA's.

Appendix 14: Equipment List

Equipment Type	Unit #	Units	TotalCost
Patient Monitoring	1,888	8	€15,104
Beds	1,592	*4	€6,368
Oxygen points	106	8	€848
Suction (wall mounted)	194	8	€1,902.27
Bed Tables	221.40	*4	€885.60
IV Stands	120.54	4	€482.16
Dynamap (monitor)	2,700	1	€2,700
Thermometers	240	2	€480
Reflo blood glucose machine		2	No Cost
Ketone Diabetic machine		1	No Cost
Crash Trolley	2,150.04	1	€2,150.04
Defibrillator	7,499	1	€7,499
Diagnostic Units	493	8	€3,984
Weighing Scales - Stand	493	1	€493
Weighing Scales- Baby	754	1	€754
Dressing Trolley	250.23	1	€250.23
Wheel chair	1,200	1	€1,200
Bed side chairs	116.85	8	€934.80
Office Chairs	124.94	3	€374.82
Computers	800	2	€1,600
Total Cost			
Total Cost with Vat @ 23%			

***remaining 4 will transfer from closed ward**

Appendix 15 : Focus Group

Prior to the meeting ending all the comments were grouped under six themes with the participants input:

- Medical Governance: would the unit get full support on a continued basis.
- Opening Times, where they long enough and should it open at weekends.
- Ward activity: reduction and the long-term effects of reduced bed occupancy.
- Staffing redeployment: would staff be interested and would they redeploy when the time came.
- Psychiatric patients: some would be suitable as require only initial assessment and referral to community services.
- Opportunities: all voiced that there could be opportunities for staff.

Of note the nurse managers concerns reflected those of the staff although they remained positive regarding the development. While there was a degree of nervous regarding the future the nurse managers agreed it was a positive advancement for child care within the organisation.

Quotes from the interview included:

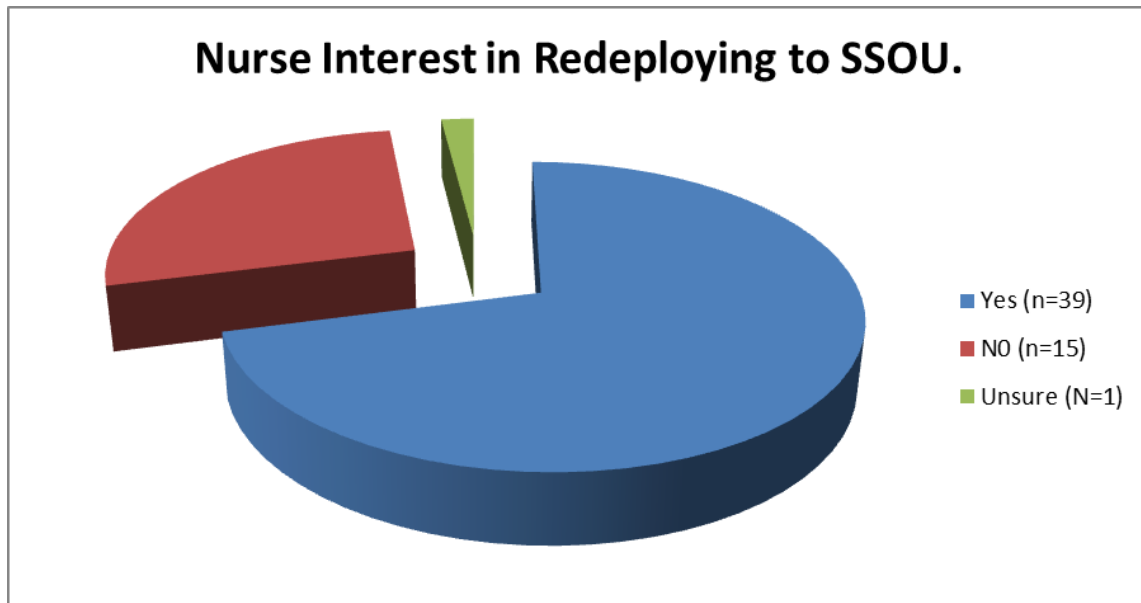
- “Tailoring improvements around the patient, not around the hospital. It might reduce admissions which might not be what we want but it is what the patients wants”.
- “Good for patient, presently holding patients for IV fluids and Nebs in cubicles, having a unit will speed the flow of patients through ED”.
- “Great opportunity for hospital and we should show case it”.
- “think its very positive, will be a busy little unit if it works right”.
- “I think it’s a great opportunity but should be linked to Rapid Access nurse and medical clinics in OPD”.

The final comment probably reflects the staff's overall opinion,

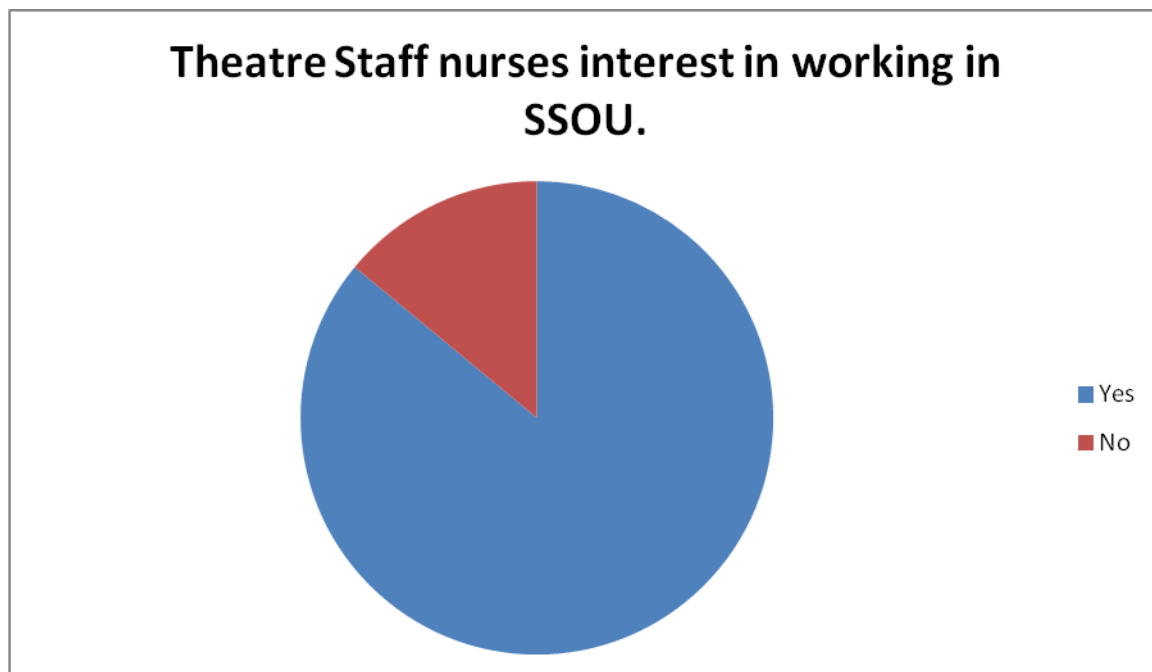
- “Great idea but what will the knock on effect be”.

In truth the full effect will not be known for months or years to come, however support for the unit development was secured from the nursing management.

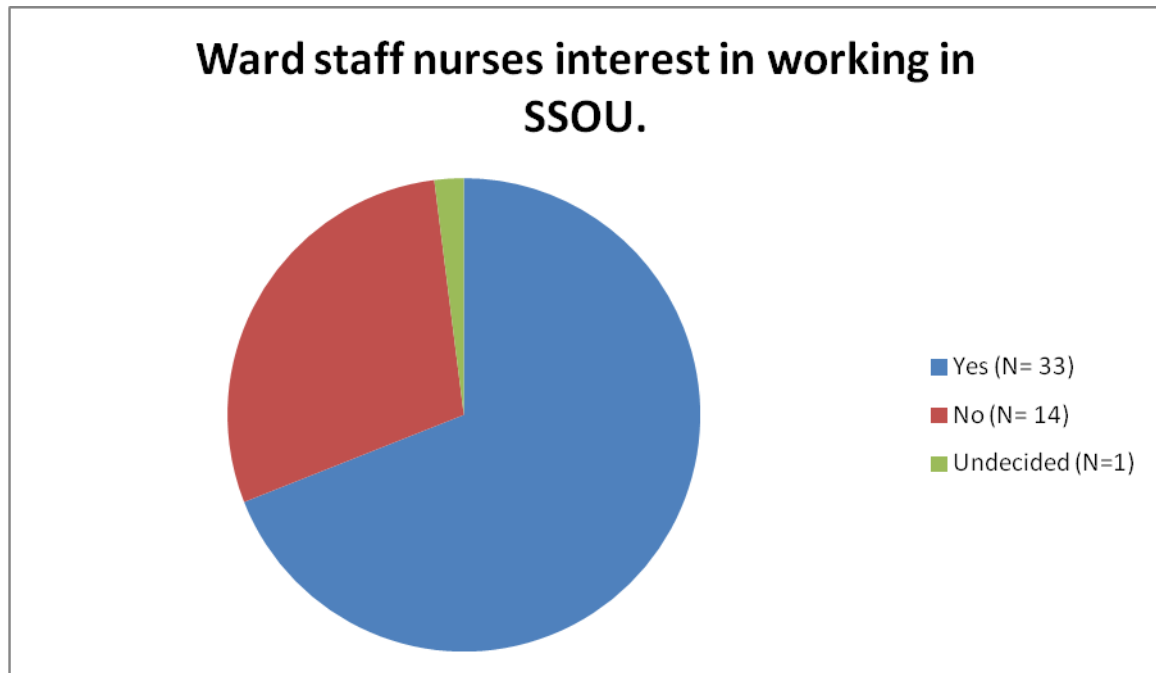
Appendix 16: Total Staff Nurse Interest in redeployment to unit.



Broken down between Ward and Theatre Staff.



10 Staff Nurses in theatre, response rate of 7 (70%).



63 Staff Nurses employed on wards, response rate 76% (n=48). 6 staff were on maternity leave and were contacted by post with 3 responding.

Appendix 17: Key performance Indicators (KPI'S) to demonstrate improvements and compliance within the SSOU.

1.Model of Care	Assessment	Gap identified	Action Plan
1.1 Criteria used to predict suitability for care in OU within 30 minutes.	Y N		
1.2 Targets high volume/rapid discharge conditions. (5-10% of Inpatient admissions)	Y N		
1.3 Patient meets admission criteria.	Y N		
1.4 Streamlined admission (administrative/clinical).	Y N		
1.5 Timely access to diagnostic services.	Y N		
2. Leadership			
2.1 Clinical responsibility lies with appropriate speciality.	Y N		
2.2 The registrar reviews the patient within 30 minutes.	Y N		
2.3 Twice daily consultant rounds are undertaken.	Y N		
3. Guidelines			
3.1 Escalation processes manage length of stay greater than 12 hours.	Y N		
3.2 Patient pathways used to manage clinical conditions.	Y N		
3.3 Support of allied health services.	Y N		
3.4 Streamlined discharge/transfer procedures (administrative/clinical).	Y N		
3.5 Discharge followed up by Community Liaison Nurse.	Y N		
4. Quality Improvements; Monitoring KPI's include:			
4.1 LOS (<12 hours)	Y N		
4.2 Conversion to Inpatient admission rate (not < 20%).	Y N		
4.3 Improved ED waiting times (> 95% patients discharged within six hours).	Y N		

4.4 Measure/Monitor patient/parental experience.	Y N		
4.5 Left before treatment or against medical advice.	Y N		
4.6 Readmission rates			

KPI References:

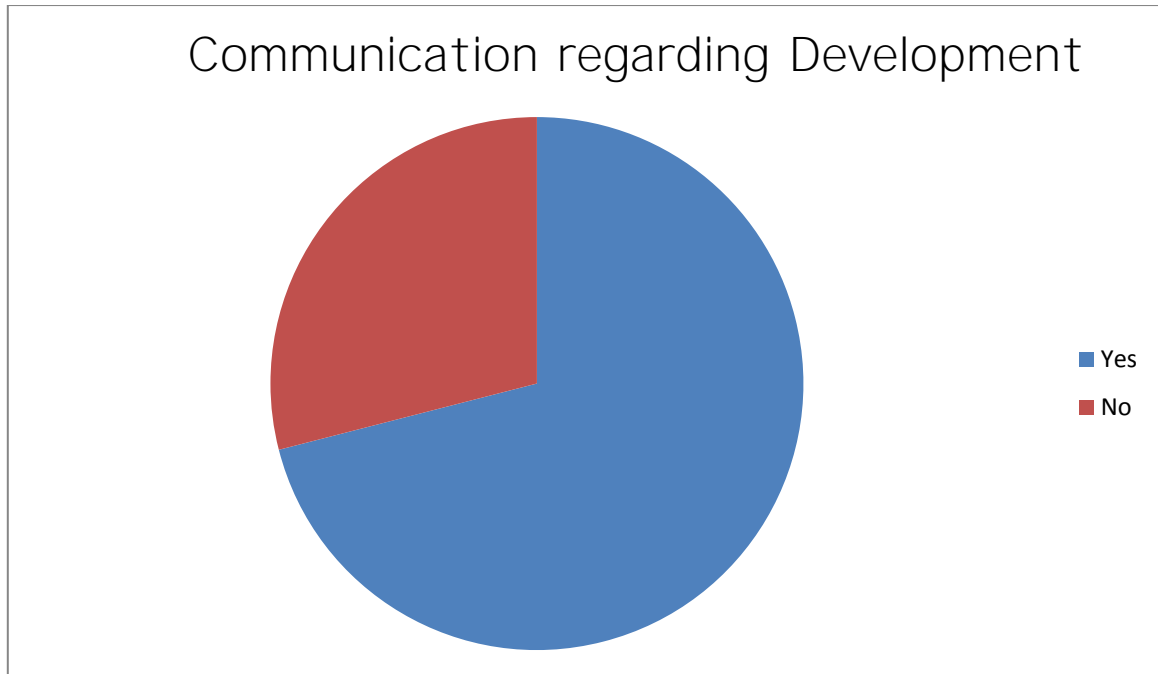
Governemnt, V. (2009). *Observation Medicine Assessment to Melbourne*: State Government of Victoria Retrieved from www.health.vi.gov.au/emergency.

Melbourne., V. G. D. o. H. S. (2009). *Observation Medicine Guidelines*. Melbourne: Retrieved from www.health.vic.gov.au/emergency.

Napolitano, J. D., & Saini, I. Observation Units: Definition, History, Data, Financial Considerations, and Metrics. *Current Emergency and Hospital Medicine Reports*, 1-8.

Other KPI's will involve the continous assessmnet of ED Compstat figures as punlicshed twice daily by the SDU (2013) which include Trolley Counts and the Patient Experinec Time (PET). PET measures the period of time from registration to physicla department from the ED.

Appendix 18: Communication



A 75% (n=55) response rate was achieved with the survey, with 71% stating that they had been kept fully informed. However, if theatre is reviewed on its own 57% (n=4) only believed that they had been fully informed. The lack of communication was the fault of the change agent who mistakenly thought that the theatre staff would have no interest in redeployment. The communication strategy was adjusted as a result.

Appendix 19: Staff Questionnaire.

Short Stay Observation Unit Questionnaire.

It is planned that a Short Stay Observational Unit (SSOU) will become operational in the NCH before the end of 2014. This unit will initially be operational Monday to Friday from 10.00hrs to 22.00hrs.

The proposed nursing shift patterns include:

- 12 hour shifts to suit the opening times of 10.00-22.00hrs.
- Therefore a staff member who is contracted to work 39 hours per week will work 3 shifts 12-hour shifts per week and 1 additional 12-hour shift every 4 weeks when working in the SSOU.
- Initially the unit will open Monday-Friday and will close at weekends and Bank Holidays.
- These work patterns and opening times may be subject to change at a future date.

To assess the interest of nursing staff in the unit it is hoped you will complete this short questionnaire.

Q.1 How long are you qualified? 0-5years ☐
 5-10years ☐
 10-15years ☐
 15years or more ☐

Q.2 Would you be interested in working in this unit?
Yes ☐ No ☐

If you answered 'No' to Q.2 above, please explain why?

.....
.....
.....

Q.3 Is there anything which you might suggest which would make working in this unit an attractive option for existing nursing staff of the NCH?

.....
.....
.....

Q.4 Have you any concerns regarding the opening of this Unit?

.....
.....
.....

Q.5 Do you feel you are being kept fully informed with regard to the development of the SSOU?

.....
.....
.....

Q.6 Is there anything else you feel that you would like to add?

.....
.....
.....

Results from this questionnaire will also be used for my Masters Change Project for the RCSI.
Hospital management has granted permission to use this information, however if you do not wish to
take part I will understand.

Thank you for your time and help.

Please return completed questionnaires by 28th March 2014 to: Eoin Power

Appendix 20: Business Case for Clerical Support

Business Case for Ward Clerk in Children's Clerical Services.

Background.

In recent months two of the clerical ward staff were granted the 3 year incentivised career break. Similarly, due to retirements, job promotions and redeployment we have lost two senior clerical staff. While Beech Ward is to remain closed additional clerical support will be required for our new Sort Stay Observation Unit.

The consultants have expressed concerns with regard to the delay in having their charts processed. This in turn delays them proposing letters to the GP's. At present we have 196 charts which require processing by clerical staff across the three wards.

HIPE Concerns

As you are aware Money Follows the Patient (MFTP) funding model was introduced on 1st January 2014. Hospitals will be funded on the care provided which has been submitted to the Healthcare Pricing Office (HPO) via the Hospital In patient Enquiry Scheme (HIPE) Record. The time line for submission of HIPE Cases is twenty eight days. Therefore it is imperative that we meet this monthly deadline, with our current staffing numbers that is not possible.

Proposal.

1 clerical officer at Grade 3 level, this person will be based on wards but will have responsibility for both the SSOU and Sleep Study booking (see benefits below).

Financial Implication

Costing : Ward Clerk_Grade III Post					
Clerical Staff	WTE	Total Basic	PRSI 10.75%	Pension 25%	Total Cost
P 0609 - Clerical Officer Grade(3) (Inc Point 1 - €20,868)	1	20,868	2,243	5,217	
<u>Points to Note</u>					
Pay rates As at 01.01.11					
Costing based on Point of Scale as identified above (See Salary Scale for more info)					
Assumes no OT/Allowances/Hol Premium etc					
Pension Cost have being considered					

Benefits.

- Enable the clerical staff to rectify a back log that cannot be resolved during current working arrangements.
- Allow the NCHD's to process the charts and send out GP letters.
- Allow efficient processing of charts for HIPE thus securing the correct MFTP Value.
- Allow accurate activity records and processing of payments for private income generated.
- The ward clerk will also assume responsibility for the Short Stay Observation Unit with regard to chart management. 2013 saw 32,276 attendees to our ED of which approximately 15 (3,228) would be suitable for admission to the SSOU. All these patients will require inpatient charts. While the charts will be made up in ED (as is the current process) the processing of the charts following discharge will require an additional resource. It is expected that 20% of those admitted to the SSOU will go on to be admitted to the wards. This will result in 2,662 charts which will require processing in ED. Inpatient activity for 2013 was 8,801 therefore based on this activity and the new activity the SSOU will bring we require additional clerical support.
- Traditionally the ward clerk looked after the sleep studies. This activity is now shared among the clerical officer as additional duties. This is one area that has the real possibility of breeching inpatient PTL's. Having a person solely dedicated to this role will ensure that all sessions are full. At present last minute cancellations by parents are not always filled due to the lack of administration support.

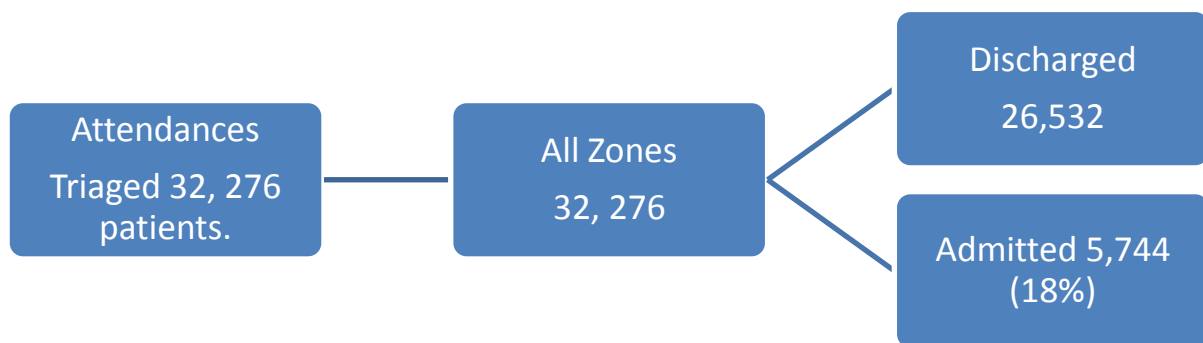
Staffing level requirements within the clerical have been discussed at length with both the clerical ward staff, clerical management in ED and OPD (who currently manages inpatient staff). These requirements have also ben discussed with both our Business Partner and the COO who have been briefed in detail on our requirements to meet present and future targets.

Appendix 21 : Evaluation of Agreed Model

A study was undertaken of current inpatient data (HIPE admissions from the children's ED) and from the ED information system (Symphony) from 2012 which was retrieved on the 20th March 2014..

Table 1 below shows the current patient journey from ED to admission or discharge.

Table 1: Present ED System 2012

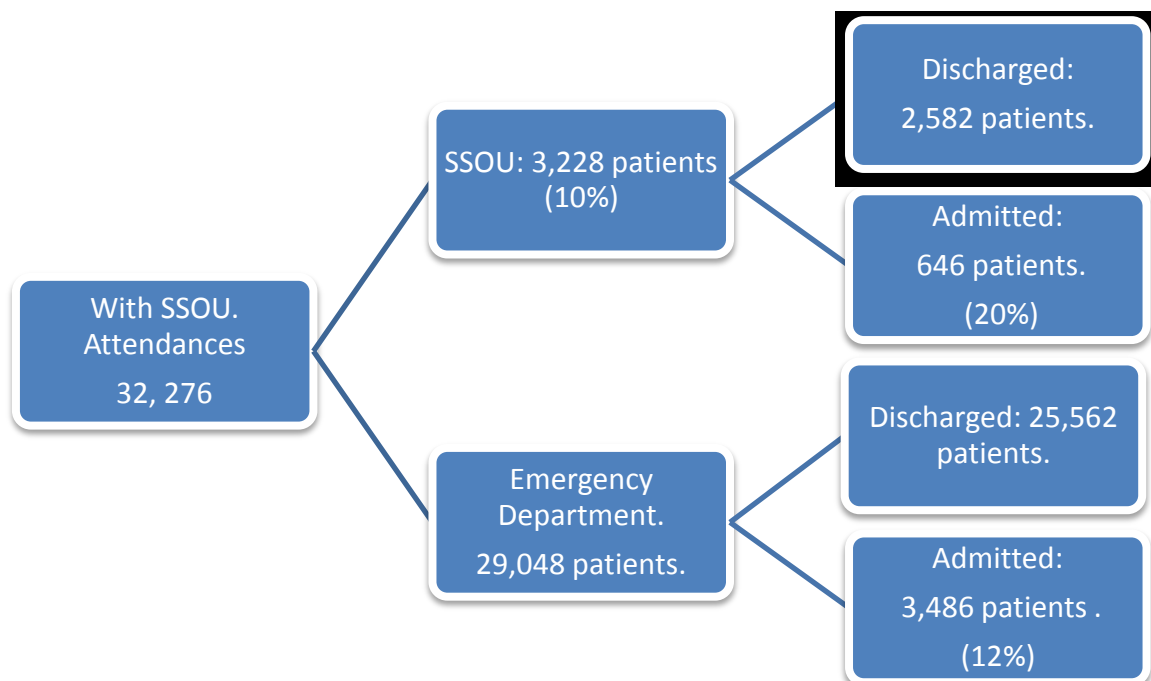


The average admission rate via ED in 2012 was 18%. The average length of stay (LOS) for inpatients was 2.88 days. However, the average rate for the conditions suitable for the SSOU was 1.5 days (Appendix 7) 8616 or 11,488 if 2 days.

Table 2 indicates the patient journey with an SSOU in place. The predicted admission rate of 10% from ED to the SSOU was based on the literature (Baugh *et al.*, 2011; Levett *et al.*, 2005; RCPCH, 2009). The literature review identified that a third of all the articles reviewed,

which referenced admission rates, identified an admission rate of 20%. Napolitano and Sano (2014) concur stating that “*traditional teaching is that 20% on patients under observation should eventuate*” (page, 6). Hassan (2003) and Rentz et al., (2004) identify that an admission rate of 20% is acceptable therefore this rate was chosen as an average.

Table 2: With New Model of Care



Research suggests that with an SSOU facility the admission rate from ED may be reduced to 12% (RKW, 2007). With a SSOU, the overall admission rate could be reduced by at least 1612 admissions. With an average length of stay of 1.5 days this equates to 2,418 bed days saved per annum or 6 - 7 beds per day. This equates to 12% reduction in the inpatient bed base use, which is supported by Hassan (2003) who identified a similar finding of 12%

following the introduction of an OU. This obviously benefits the child, parent and may have significant cost savings to the hospital.

Hoot and Aronsky (2008) identified that up to 22% of patients can be “boarding” in ED where they are receiving treatment or awaiting admission. Anecdotal evidence within the ED supports the finding that observational medicine does occur, however with the present data collection system (symphony) does not capture this. These “boarding” patients subsequently block ED access, increase waiting times and reduce efficiencies many of these patients would be better treated in an SSOU thus streamlining the ED admission system.

Some conditions might be better suited to an alternative setting if it was available. McConnochie *et al.* (1999) estimated that “*the proportion of hospital admissions for simple, acute gastroenteritis that might be avoided through care in an alternative setting could approach 90%.*” Therefore, with our careful selection of medical conditions, we might achieve a higher admission then the 10% proposed.

By diverting “boarding” patients, previous admission and with careful selection of patient conditions suitable for the SSOU it would seem possible to reach a target of 10- 20%. However, this might not be feasible until the unit is operational for several months. The evidence from our visit to Salford in Manchester suggests that this is possible as they have an admission rate of only 4%.

Appendix 22: Gantt Chart

Mini Gantt Chart

Project Steps / Phases	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May
Literature Review									
SSOU Committee									
Discuss & Agree Conditions Suitable for treatment in SSOU.									
Governance Structure discussion and agreement.									
Paediatric Medical Advisory Committee (PMAC) ratification of Governance Policy.									
Equipment Selection, costing and financial approval									
Work Force Planning									

Communication Strategy									
Write up study									
Submit Thesis									24 th May

Appendix 23: Poster

 <p>RCSI INSTITUTE OF LEADERSHIP <small>RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE</small></p>	<p>Commissioning a Short Stay Observation Unit (SSOU) in a children's facility within a DATH's Hospital.</p> <p>Eoin Power. email: eoinpower01@eircom.net</p>
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Abstract

Abstract

This change project involves the commissioning of a Short Stay Observation Unit (SSOU) within a DATH's Hospital. SSOU's deliver intensive short-term assessment, observation or therapy to selected ED patients to optimize early treatment and discharge. Observation medicine in dedicated units is a feature of many adult Emergency Departments (ED) but this has not been reflected in children's ED's in Ireland.

The current literature supports the development of SSOU's, indeed it is very much in line with the new National Model of Care for Paediatrics in Ireland and the new National Children's Hospital.

Developing a unit can be challenging and there is much to be considered when selecting the governance structure, choosing suitable conditions, staffing and developing metrics to help monitor its performance post opening. The creation of this new unit required a cultural change with regard to how care is delivered within the hospital. This required a change to the "day to day" practices of the consultants and nurses. Such changes can be difficult in large, complex healthcare organizations. However, the underlying assumption of this project is that the patient comes first and that SSOU's are designed to prioritise the patient and not staff, management or finances.

The rationale for the change is to streamline ED services by transferring observational patients from ED to the SSOU thus reducing ED waiting times and inpatient admissions. The HSE Model of Change (2008) was used to guide and manage the change process. The project was evaluated against the project objectives, a nursing survey (n=55) and nurse management focus group (n=5) was also used to evaluate the success of the project. The results indicate that although staff have some concerns with regard to the development 71% (n=39) would be interested in redeploying to the unit upon its opening.

The study also identified a potential saving of 6-7 inpatient beds per day with an operational SSOU. SSOU's have been shown to reduced hospital length of stay and costs while increasing parental satisfaction.

Finally, the author discussed the findings of the project in light of the current literature and from the experience of undertaking the project. The strengths and limitations are identified and recommendations for the organisations are documented.

Commissioning a Short Stay Observation Unit (SSOU) in a children's facility within a DATH's Hospital.

RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE

Eoin Power.
email:eoinpower01@eircom.net.

Introduction & Background

A SSOU is a facility in which children with acute illness or injuries can be assessed, investigated, observed and treated without recourse to inpatient admission. Currently, children requiring assessment are often admitted as inpatients. This results in a longer period of stay due to traditional ward processes. SSOU's have been suggested as a safe, efficient and cost effective¹ alternative that mirrors Clinical Decision Unit development in adult Emergency Departments (ED).

SSOU's are at the core of the proposed National Model of Care for Paediatric Healthcare in Ireland and the new National Children's Hospital².

Aim & Objectives

Aim: To commission a SSOU in a children's facility within a Dublin hospital.

Objectives:

- Establish a SSOU Operations Committee.
- Develop, agree and implement a governance structure.
- Identify staffing levels requirements through work force planning (nursing, medical and non-clinical), negotiate agreement for redeployment of nursing staff and present a business case for additional staff as required.
- Identify and secure financial approval for the equipment required for the SSOU.
- Communicate clearly with staff at all stages of the development.
- To agree the medical conditions to be treated in the SSOU.

References

1. Connors, G. P., Melzer, S. M., Percelay, J. M., Betts, J. M., Chittkara, M. B., Jewell, J. A., Ackeman, A. D. (2012). Paediatric Observation Units. *Pediatrics*, 130(1), 172-179. 2. Children's Hospital Group Board (CHGB). (2014). *Working together for our children: The new children's hospital, an overview at pre-design phase*. Dublin: CHGB. 3. Health Service Executive (HSE). (2008). *Improving our Health Service: a users guide to managing change in the health service executive*. Dublin: HSE. 4. Rawlinson Kelly & Whittlestone. (2007). *National Paediatric Hospital: ambulatory and urgent care centres for Greater Dublin*. 5. Stufflebeam, D. L., & Shinkfield, A. J. (2007). *Evaluation theory, models, and applications*. Jossey-Bass San Francisco, CA.

Methodology

The HSE change model³ was used as a change model for this project.

Initiation:

The trigger for change came from the HSE's vision to reduce ED waiting times and inpatient admission rates.

- A Vision and Mandate for change was secured from management.
- A SWOT, Stakeholder Analysis and Force Field analysis was undertaken.

Planning:

- Operations Committee formed.
- Communication Strategy devised.
- Implementation Plan devised.
- Create commitment and momentum.



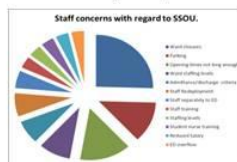
Figure 1: HSE Change Model³

Implementation:

- Identified Change champions.
- Governance document drafted.
- Workforce Planning.
- Site visit to UK to see exemplary unit.
- Multidisciplinary team to identify equipment.

Mainstreaming:

- Focus on embedding the culture change with regard to patient care.
- Nurse management focus group and staff nurse survey completed.



- Nursing redeployment agreed.
- Shared Governance Model agreed.

Evaluation

The Stufflebeam Model, also known as the CIPP model (Context, Input, Process and Product), was used to evaluate this project⁵.



- SSOU Committee established and operational.
- Governance Structure ratified.
- Work Force Planning completed.
- Equipment funding secured.
- Communication Strategy successful.
- 8 Medical Conditions suitable for SSOU care were agreed.

Organisational Impact

SSOU's divert patients away from costly inpatient beds.

SSOU's streamline ED care ensuring greater efficiencies.

While recognising this is a major cultural change within the organisation results from the focus group and staff survey indicate strong support.

The SSOU was commissioned with an estimated opening date of October 2014.

Conclusion

SSOU's provide an alternative to inpatient which have been shown to reduce length of stay and hospital costs while increasing parental satisfaction¹.

SSOU's are at the core the new Model of Paediatric Healthcare in Ireland and the new National Children's Hospital².