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INTRODUCING A NEW NURSING ADMINISTRATION FUNCTION AT AUBMC: ACTIVE BED MANAGEMENT

By

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AN ABSTRACT OF THE PROJECT OF

Salma Lamaa for Master of Science in Nursing

Major: Administration Track

Title: Introducing a New Nursing Administration Function at AUBMC: Active Bed Management

Aim: Healthcareorganizations worldwide face the problem of having available beds to admit patients requiring hospitalization obstacle which is vacant beds for admission of patients. One of the major consequences of the problem is overcrowding in emergency departments (EDs) due to the inability to admit patients to clinical floors.The aim of this project is to propose the appointment of a nurse bed manager at AUBMC to implement a new nursing administration function – active bed management (ABM). The role of the active nurse bed manager will be to improve the organization of patient discharge procedures from clinical floors and facilitate the transfer of ED patients to inpatient units.

Method: A systematic literature review was undertaken to identify the functions of active bed mangers by country and profession. Online advertisements of bed manager positions were accessed to locate position descriptions. A position description suitable for introducing the role at AUBMC was prepared and graded. The cost of the role for the first three years of appointment was estimated. A force field analysis (FFA) was undertaken to assess the likely success of the role at AUBMC.

Results: There is evidence that introduction of the ABM role is successful in reducing boarding times in EDs and in improving patient safety. The ABM role is undertaken by physicians, nurses or interdisciplinary teams in the United States. The role has the potential to reduce costs and to generate income.

Conclusion: It is feasible to introduce the role of active bed manager **(ABM)** at AUB. At minimum the position would need to be graded at a minimum of Grade 12 to attract a nurse with the required qualifications to the role: a Master in Nursing Science Degree and at least five years relevant experience. The cost of introducing the role over the first three years is estimated at XXX. These costs may be somewhat off-set by possible savings and potential income generation.

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CHAPTER 1

INTRODUCTION

1.1 Lack of beds for transferring patients from the emergency department to the needed unit

The most current and yet one of the oldest problems in the circle of patient admission-discharge process is the delay in transferring patients from emergency department (ED) to other units (Tortorella et al, 2013), (Rabin et al, 2012), (Barrett et al, 2012), (Chand et al, 2009), (Howell et al, 2008). The reasons vary from the paperwork needed to introduce the patient into the hospital system, the staff needed to guide the process, and the laboratory and radiology studies required to facilitate accurate triage of patients to the available of beds on the units. Delays in the admission process due to wait times in any of these areas leads to patients kept unnecessary in ED's and increased risks to patient safety as a result of the attention of physicians and nurses being diverted to take care of patients of equal or higher acuity. One of the main reasons for patients spending more time in ED than necessary is the lack of available beds in ICUs (Rabin et al, 2012; McCaig et al, 2009).

A first step in addressing problems in transferring patients to ICUs is ensuring existing inpatients are discharged in a timely manner without unnecessary holds (Tortorella et al, 2013), (Chand et al, 2009; Howell et al, 2008), that patients who are discharged are fit for dischargethat transfers occur to compatible units, that real time updates are made to patient records during physician and nursing rounds (Tortorella et al, 2013).

However, without a designated person to manage and facilitate the discharge process current in-patients ‘block’ beds, with the result that patients ready for transfer from EDcannot be admitted to the ED.There are only three ways hospitals can address this problem: capacity can be increased by adding beds, more efficient use can be mad of existing beds (Chadaga et al,2012), or the hospital can forego revenue by temporarily closing admission to the ED department.

1.2 Length of stay of patients in the emergency department

Boarding is the term used to describe the practice of keeping patients on stretchers in ED hallways for hours, or in some cases days, while they wait for a vacant bed in ICU. Boarding results inovercrowding in the ED increases patients’ risks for morbidity, length of stay, and mortality (Rabin et al, 2012; McCaig et al, 2009).

The longer it takes for a patient to be transferred to the ED, the higher the risks to patient safety as a result of exposure to infection from other patients, lack of access to intensive treatment, decreased privacy, and possible shifts in scheduling surgery(Chadaga et al, 2012; Rabin et al, 2012; Tam, 2010; Howell et al, 2008) and potential injury if patients are left unattended.Nurses, physicians and administrators working to overcome this problem realize that patients are not items lodged and shelved, but are actual human beings with imminent needs that require attention, and the longer they stay in the ED, the higher the possibility that their length of stay in the hospital is multiplied (Rabin et al, 2012).

1.3 Patient dissatisfaction

While hospitals strive to reach international standards of excellence in service and safety measures, elongating the patients stay in the ED can result in cross-contamination, inadvertent exposure to hidden contagious diseases, delays in scheduled operating room services and transfer to appropriately designated beds, or breeches in privacy, all of which are reasons for patient dissatisfaction that may lead to departure from the ED and heading to other facilities, which will also cause impeding that specific patient's prognosis since medical care wasn't accessed in a timely manner (Chadaga et al, 2012; Majeed et al, 2012; Clark K. & Normile L., 2012; Howell et al, 2010; Ricci, 2002).

When patients are dissatisfied, they tend to lose trust in the medical system, and are more reluctant to contact health professionals when they need medical assistance. Furthermore, levels of patient satisfaction are an important factor in increasing competition between medical centers. Patient satisfaction and timely access to medical careare priorities in the United States due legislation and hospital accreditation standards, but clinical realitiescan frustrate progress due to ED boarding and concomitant delays in admitting patients to clinical floors (Rabin et al, 2012).

1.4 Patient safety

Overcrowding in the ED and delays in access to in-patient beds impedes hospitals' ability to reach national safety and quality goals, compromises the health care safety net, and limits the national capacity for disaster response (Rabin et al, 2012). Moreover, holding admitted patients in crowded conditions carries in addition to the

risks mentioned, worse outcomes for stroke, cardiac, and intubated patients, lapses in daily medications and other routine care from overtaxed ED staff (Rabin et al, 2012).

1.5 Problem status

1.5.1 Worldwide

Out of 31 articles reviewed for the purpose of this project, 23 were found in the USA and 8 in non USA countries, mainly the UK, and all discussed means to facilitate the flow of patients from ED to inpatient hospital beds or towards more accurate triaging (Figure 1).

Active bed management has been an important component of successful strategies to overcome the problem of 'blocked' in-patient beds and ED boarding, but the function has been shown to have additional advantages including cost-savings and new opportunities for revenue generation (Chadaga et al, 2012; Howell et al 2012; Rabin et al, 2012)!

1.5.2 In the Arab Region

No valid references were found from the Arab Region as far as how bad the problem of ED boarding and admitted patient transfer delay is rooted, but there are media related reports that may serve as a general outlook into the hands on temporary solutions.

The Arab region has been suffering turmoil and every conflict is projected on the solidity of the particular regions' healthcare abilities. Other than the major Gulf countries, media documents having mobile clinics funded by the local Ministries of Health, The UNRWA, UNICEF, or RED CROSS. On the other hand, in more

developed areas, infirmaries and proactive medical follow-up take up most of the national health awareness campaigns and result in a more organized patient flow. Here we must realize the difference in medical insurance system among the Arab countries, which will affect on the long run the adequacy of healthcare access.

1.5.3 In Lebanon

The problem of ED boarding, overcrowding, staff burnout, reduced medical resources, and lack of shared governance among the Ministry of Public Health (MOH) and Lebanese hospital administrations in general exists. Despite the Lebanese hospitals' strife to achieve national goals as set by the MOH and international safety and quality goals like JCIA put this in full Salma and NDNQI and NDNQI, the pursuit is customized according to the strategic location of the hospital, its fundraising abilities, and affiliations.

Except for during the Civil War (dates) Lebanon has not been faced by multiple disasters at the national level that were dealt with basically by diversion to major medical centers in the capital Beirut, or other major hospitals according to the location. None of the smaller facilities had either the strategy or the resources to act proactively to be able to dodge these disasters or alleviate the edge of limited access to medical care by most citizens afflicted in rural areas.

The effort made in this project was to introduce a change, a staged ray of light that can get hospitals out of this vulnerability zone when applied appropriately, which is the role of the Active Bed Manager.

1.5.4 At AUBMC

AUBMC's ability to perceive and control the flow of patients from ED to inpatient beds is admirable, but that doesn't register in hundred percent efficacy of the system, and is rather pressed hard upon in times of disasters where most regional hospitals divert their patients to AUBMC's ED, such as in the war of JULY 2006.

The percentage of boarding at AUBMC ED is 7.26% and number of diversions is 23 (January - December 2014).

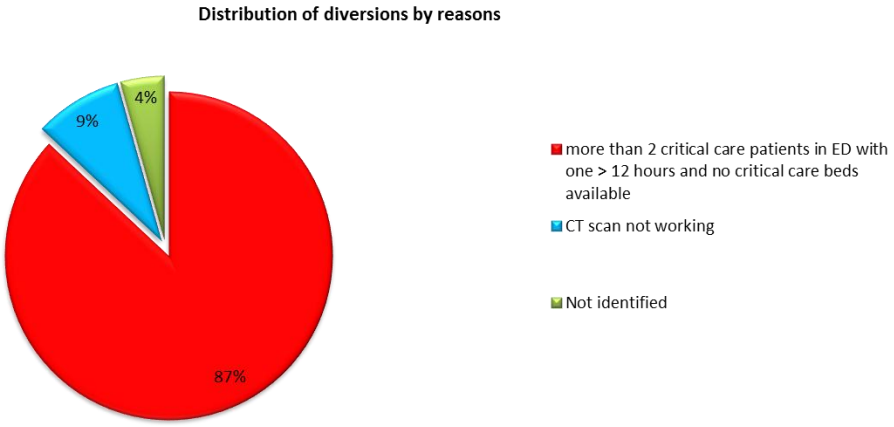

Figure 1: Distribution of ED Ambulance Diversion by Cause

AUBMC has sought to address the problem of ED boarding by integrating the responsibility for bed management in the role of Care Coordinator and ED Case Manager. However, these developments have not completely resolved the problem, therefore, additional initiatives are required.

In order to fulfill the patients' expectations, provide a service that protects patients from waiting helplessly in the ED, AUBMC needs a strategy to facilitate transfer from ED to ICU in a timely manner. The appointment of an Active Bed Manager (ABM) is a possible solution to current problems of ED boarding and

ambulance diversion, as supported by evidence from international literature (Chadaga et al, 2012; Barret et al, 2012; Howell et al, 2010; Howell et al, 2008).

1.6 MAGNET designation

AUBMC is a MAGNET designated facility. MAGNET designation defines the institution's ability to attract clients, patients, physicians and nurses. An institution such designated will be the melting pot of the elite surgeons and experienced nurses seeking a medical center that does not bind their potentials but expands them whilst maintaining an air of satisfaction that is unprecedented. As such, clients head are attracted to the institution with legitimate expectations that its administration has figured out the way to provide consistency in excellent patient service and trust that it will invest all its resources to maintain exactly that level via research and academic development of its staff and faculty.

1.7. Active Bed Manager: A new role in Nursing Administration

In order to fulfill the righteous expectations of our clients' patient expectations, and to provide a service that not only decreases the demise of the patients but protects patients from awaiting helplessly in our the ED, AUB needs a strategy to facilitate timely transfer from ED to the ICU. The appointment of an active bed manager is a possible solution to current problems of ED boarding and ambulance diversion. but also a means to concoct a rich solid revenue of finances and resources resorting solely to internal efforts, the role of the Active Bed Manager is to be discussed as a new era for nurses, who have always been there at the front line and know every policy and

procedure, are updated, fresh and competent at any calling, and who cherish their sole goal, patient satisfaction (Proudlove, 2007).

CHAPTER 2

METHODOLOGY

2.1 Research Design

The study was undertaken by using four lock-stepped processes as illustrated in Figure 2.

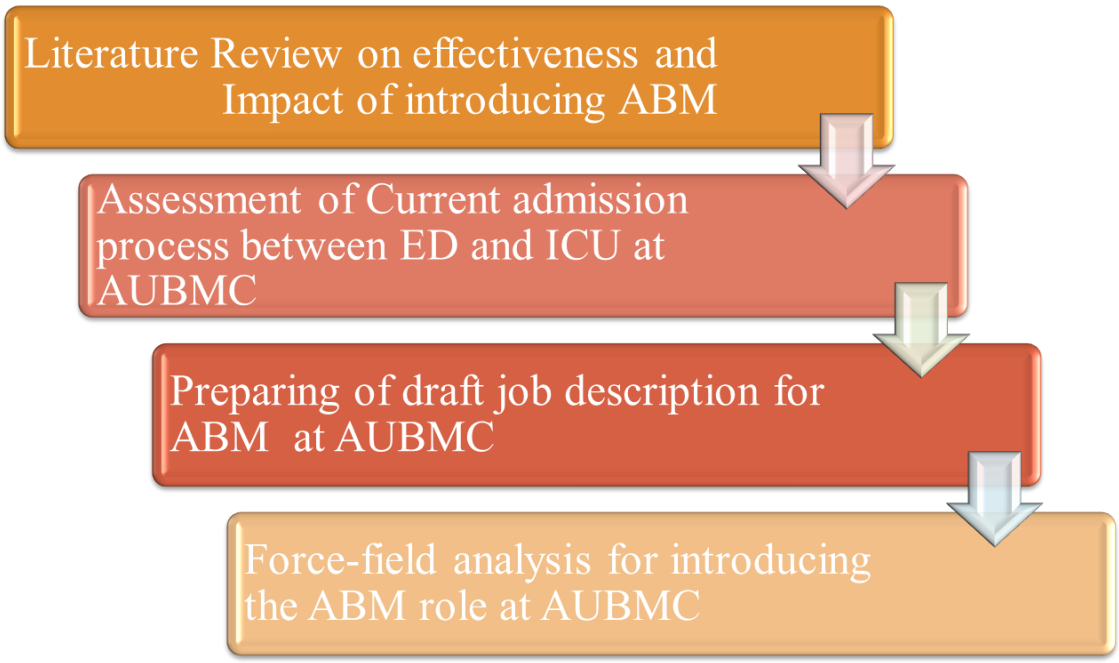

Figure 2: Methodology

After having assessed the risks and rising needs for a position that would act as an expeditor and assist the patient flow from ED to inpatient beds, specifically intensive care unit (ICU) beds, I needed to take a look at literature available to relevant positions, their criteria, methods of application, feasibility, and measures of effectiveness that might be of use to AUBMC.

Surfing the net and the literature offered at Saab Medical Library, I was able to find relevant inf**or**mation that might come in handy when formulating a draft position description. Scopus, CINAHL, and PubMed e-data bases were used in searching for articles that describe the impact of Active Bed Management on patient waiting time in ED, diversion, patient safety, and cost.Articles mainly discussed means to facilitate the flow of patients from ED to inpatient hospital beds or towards more accurate triaging. Multidisciplinary teams were identified as fulfilling the active bed management function in almost half of the articles (45.0%); the role was reported as filled by physicians in almost 38% of the articles, and nurses were reported in fulfilling the role in 16% of the articles. Leaving aside their role in multidisciplinary teams, the ratio of physicians to nurses in active bed management roles was 4.5:1. Again excluding multidisciplinary teams, the role of active bed manager outside the United States was as likely to be fulfilled by a nurse as a physician.

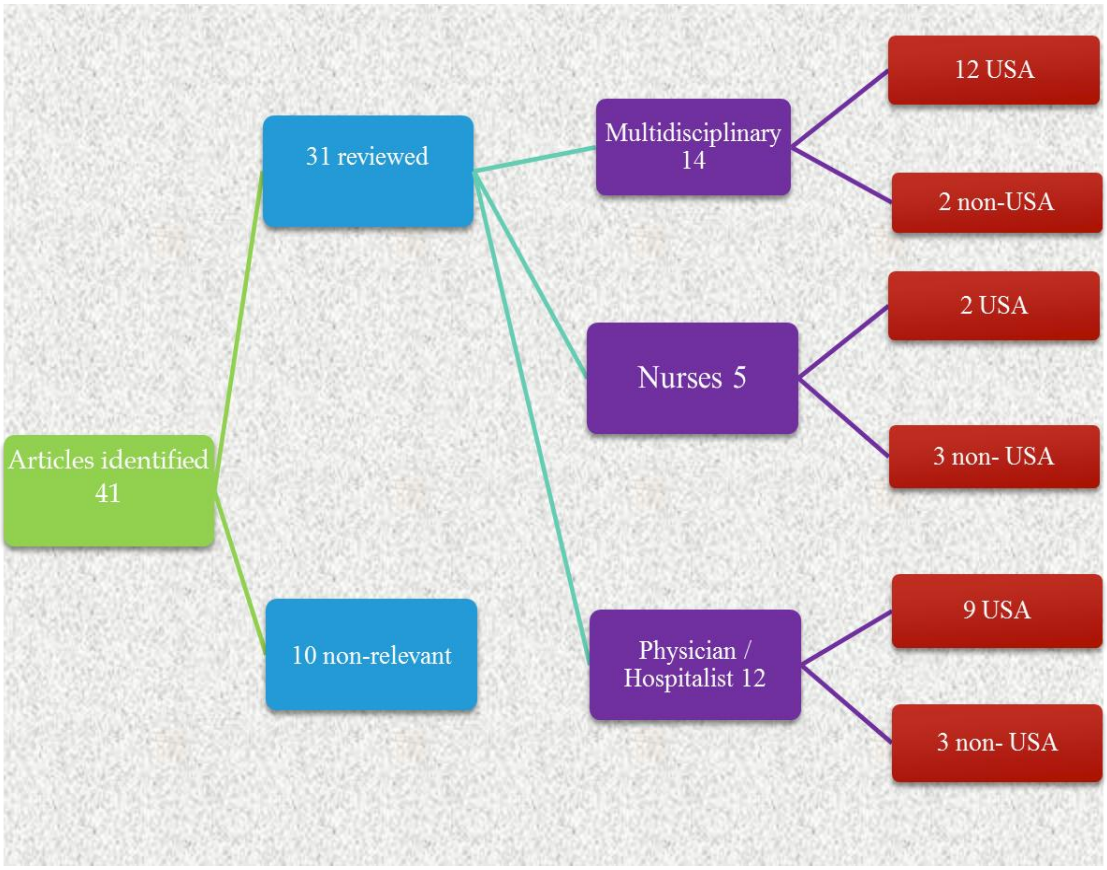

Figure 3: Classifications of Articles Reviewed by Country and Profession of Bed Manager

2.2 Sourcing Position Description

A tour over online Human Resources departments that posted vacancies for relevant position sources was needed undertaken to gather an idea on how other hospitals have perceived the role of a bed manager and how they categorized and analyzed the criteria before they achieved the conviction for the need to allocate resources for this position. Five job descriptions were selected from hospitals; content was analyzed to identify the main functions included in the job description.

2.3 Analysis of position description

The common factors that triggered the need for the new position establishment were analyzed and as such the position description was built step by step, with the assistance of the most literature review I could find about relevant positions that enabled me to formulate the position description draft. You need to provide an overview of your analysis.

2.4 Consultation with the Human Resource (HR) Director

I was able to contact Mrs. Haddad in HR to check with her on the prevalence of this position, its feasibility, its ranking and potential costing. We weren't able to pinpoint a similar position in the region but I explained to her the goal of formulating the new position and thus her input was valuable.to consult with an AUBMC human resource management specialist to grade the draft job description.

2.5 Preparation of the draft job description

As a result of accumulated data, an outline of the position was set, and a detailed description of the role summary was drafted. It was necessary to be clear about relevant educational and professional criteria and their implication on bed management responsibilities, clinical responsibilities and reflection on other departments and staff, level of communication and sequence of leadership, educational responsibilities, and clinical governance. See Appendix A for the draft job description.

2.6 Cost cycle analysis

Any employee acquiring a management position, as per the consultation with Mrs. Haddad, is to be graded 12, and as such the calculation of the basic salary was done. The minimum grade for the Active Bed Manager advised by the human resource management specialist was Grade 12. As an institution that encourages and endorses professional development, yearly educational allowances were sourced and calculated, costs of conferences and relevant educational activities were added, and costs of the setting of the new position. However, consultation with experienced nurses at AUBMC has advised that this grading is too low to attract candidates. Informed advice is that the position should be graded in not less than Grade 13.

CHAPTER 3

LITERATURE REVIEW

In the current language of hospitals, administrations try to decipher reasons why, at this point in time, there still are patients not receiving full care, are waiting on trolleys in ED settings, are placed in ill-fitting beds throughout the hospital, or are waiting for a surgery that has been rescheduled due to unfortunate management. Till now, the people responsible for the analysis of these mishaps have come far in pinpointing the sources of the problem, but not, as of yet, achieved full recovery (Rabin et al, 2012; Tortorella et al, 2013; Howell et al, 2008; Chand et al, 2009).

3.1 Identifying the problem

Managing the process upon which patients are admitted requires an educated finesse that has been long attached to a category of hospitalists and physicians working under the roof of an administrative job description. Our aim in this paper is to dissect the problem and highlight the areas where nursing services play an important role in changing the outcome of any adopted plan of action.

As we all know, people arriving at the ED setting are in worse shapes than before (Woodard, 2001), which necessitates awareness of the hinderences that prevent them from accessing medical care, no matter what the obstacles route from (Tortorella et al , 2013; Chand et al, 2009; Howell et al, 2008). That idea is not merely a point of view but a proven observation that has repeated itself with the whole healthcare congregation watching and making different action plans to reach assessable goals. What are these

hinder-mints? How do we define them, when do we see them and why? This is what we are here to talk about, for knowing what the problem is the key to suggesting solutions.

3.2 The admission cycle

First, let us briefly describe the vicious cycle hospitals are getting trapped in. Patients arrive to the ED setting requiring either medical or surgical management, and get stuck at one of two places, either at the very door of the ED (Barret et al, 2012), within an ambulance that is getting diverted due to lack of vacant beds and ED overcrowding (Chadaga et al, 2012; Howell et al, 2009;Howell et al, 2008), or at the trolleys of the ED, where management may or may not have been initiated, awaiting transfer to an inpatient bed that could not be located due to faulty bed management (Chadaga et al, 2012; Barret et al, 2012). Here, healthcare facilities call for the assistance of active bed management, a process which has been evolving over the previous decade involving a multidisciplinary team, mainly hospitalists, nursing, physicians, informatics ,all the way through to the housekeeping department (Howell et al, 2009).

3.3 Demand for Intensive Care Units, gap one

Bed shortages are most likely to occur in Intensive Care Units. An overflow of patients occurs when the number of transfers from Accident and Emergency (A&E) department is greater than the number of beds available in these units (Teow et al, 2011; Rabin et al, 2012; Howell et al, 2009). Intensive care unit beds are precious and rare to grasp easily, for there are always patients whose medical status have changed into what can either be transferred to a less critical unit, an intermediate setting or an outpatient

community setting when that is applicable (Chadaga et al, 2012; Howell et al, 2010; McKinney, 2009).

3.4. Boarding and throughput time, gap two

Nevertheless, the patients who have been decided to be admitted and are still waiting on the ED trolley are called *boarders* (Barret et al, 2012). The time it takes them to pass from the moment of admission to the actual time of transfer or discharge altogether as may be the case, is called throughput time, or hold (Barret et al, 2012; Howell et al, 2009). The more the problem with allocating a bed within the hospital or a suitable bed in another facility lingers, according to the case, the higher the probability that patients within the ED setting suffer escalation in their medical condition, the more the percentage of possible hospital acquired infections or exposure to others with contagious illnesses, the higher the mortality rate and the lower the prognosis and the longer the length of stay (Majeed et al, 2012), (Howell et al, 2009).

3.5 Diversion, gap three

This *overcrowding* in the ED setting may result, as mentioned before, in increased hours of ambulance diversion, which is the time registered by the ED director where no ambulances are accepted and are left to seek another facility or manage the cases with whatever means available (Proudlove ,2013), (Barret et al, 2012).

3.6 Overflow –contained –case gap four

As well, there are patients who are admitted to units that may not be of specific benefit; this is defined as overflow. When overflow meets a certain level of

convenience, the admission is called a *contained case* (Teow et al, 2011). Otherwise, the patient is at a hazard of receiving less than optimal care due to understaffing, overcrowding, burnout, or geographical incompatibility of the unit they have been placed at (Chadaga et al, 2012; Rabin et al, 2012; Tam, 2010; Howell et al, 2008).

3.7 What is our purpose?

What we just discussed only breaks the tip of the iceberg, and no healthcare institution has had it within its moral values, mission and vision that its healthcare becomes less than fully accessible, optimal, and customized to the community needs in full preparation to all situations. All we now need to do is discuss what those analysts have been arguing, the feasibility of their applications, and where the role of nurses lays in this new blizzard where the only goal is patient safety and satisfaction. Of course, achieving that goal leads inevitably to higher hospital revenues, which in turn boosts the facility's financial ability to sustain a healthy staffing strategy without the risk of high turnover and staff burn-out, and magnifies the hospital's technical resources, which in turn serves the original purpose without the need to add more beds to accommodate increased inpatient bed demand.

3.7.1 How to manage the gaps?

As a multidisciplinary body, there are many changes hospitals can adopt to bear off the burden of increased bed demand with as little compromise to care as possible. Multidisciplinary meetings can be held to discuss cases where transfer from intensive beds to an intermediate unit or a more convenient case or age dependent healthcare facility could be arranged (Chadaga et al, 2012; Barret et al, 2012). Follow up rounds by

this team, which is the active component of active bed management, may lead to highlighting appropriate candidates for this kind of transfer and even promote discharge on different unit, where in this case patients are shifted more conveniently according to their medical needs right into the beds that active bed management teams have helped vacate (Chadaga et al, 2012; Barret et al, 2012; Howell et al, 2010; Howell et al, 2008). Nursing supervisors and in charges on all units, with their routine assessment and hourly follow up on patients' lab results, radiology screenings, and physical status are a direct factor in the process of decision making, which makes their input of immense importance, thereby allowing the nursing force throughout any given hospital to be a candidate for assuming the responsibility of active bed management, or bed utilization management (Ricci, 2002).

3.7.2. What are the Resources?

Consistent support for this role needs, in the end, the assistance of the physicians, administrative team that allocates resources , the technical informatics team that makes bed status digitally accessible to the service department responsible for prepping the bed for a new admission, transport team that relocates the patients from one unit to another , transportation facilities that relocate patients to other healthcare settings such as home healthcare or home discharge, and the housekeeping department that takes care of prepping the room and bed to optimal status for receiving the new admission (Barret et al, 2012; Chadaga et al, 2012; Howell et al, 2010). This cycle completed, we go back to the point where communication between these multidisciplinary bodies is of vital importance for crunching down wasted time between the decision of discharge or transfer, which may be delayed if the services responsible

for patient transfer/discharge were not promptly informed, which may also be delayed in case the safe transport of the patient was not secured due to miscommunication with the receiving destination (Majeed et al, 2012).

That part being done, having had the patient transferred or discharged, the housekeeping department needs to be informed promptly so that the bed can be prepped in a timely manner with a swift follow up on updating the admitting office on the status of the now vacant bed so that an ED boarder can be relieved of his trolley waiting time. Of course, first the receiving unit or destination should be notified so the staff/resources needed to receive this new admission are allocated (Jordan & Ricci, 2002).

This process can be quickened by the intelligent use of informatics technology, or a dashboard, that helps all members and services of the active bed management digitally updated on bed and patient status, even starting from the process of checking on readiness of radiology and laboratory results which by itself has noted to be a reason for delay of discharge decision making (Rosow et al, 2003).

3.7.3 Miscellaneous interventions

Most hospitals enduring larger volumes of boarders have established subdivisions to initiate access to appropriate assessment and treatment before actual transfer to an inpatient bed is decided or complete. As a result of the efforts done in those subdivisions, the decision to admit may vary according to the outcome (Rabin et al, 2012). Such management allows for alternatives to inpatient admission which may no longer be found confined to intensive care or specialty beds (Howell et al, 2008). A bed czar, a most appreciated and effective role mentioned throughout the literature review related to our topic, can act as an internal or external allocator of resources and

settings suitable for any surge of patients to ED settings (McCaig et al, 2009; Rabin et al, 2012; Howell et al, 2008; Tam, 2010; Robinson ,2004) . Networking has been initiated among some metropolitan hospitals allowing this bed czar to be on top of the vacancy situation in his/her region, which helps also in times of crisis (Rabin et al, 2012).

Each term mentioned in this literature review will be thoroughly discussed throughout this study comprehensively with its importance in the US active bed management and how it may affect Lebanon in general and AUBMC in specific.

3.7.4 Improvements following assignment of an Active Bed Manager

In order to be assertive in our efforts to understand the benefits of acquiring an Active Bed Management position, we developed the following table during the literature review that entails documented improvements and the references related.

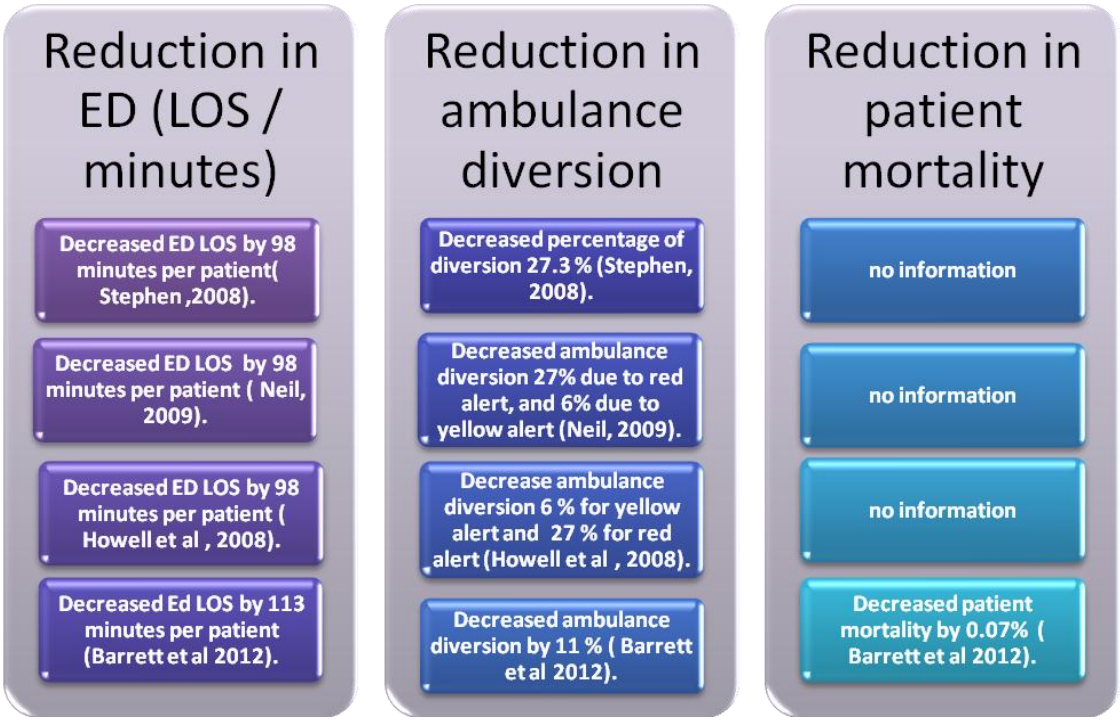

Figure 4: Patient-Safety Improvements Following Introduction of Active Bed Management

*Red alert: ambulance diversion because of lack of beds in ICU, yellow alert ambulance diversion because of overcrowded ED (Neil, 2009).

I displayed the resources discussing the actual cycle of changes following application of the Active Bed Management position, and the articles expressed a good bulk of information with numbers. In his article (Stephen , 2008) Active Inpatient Bed Management Reduces ED Stay for Admitted Patients, Stephen did six months intervention period in USA, at level II trauma center, 335 beds. This study showed that ABM shall reduce ED overcrowding and reduce ambulance diversion, decrease in patient stay at ED (98 minutes per patient), and decrease diversion 27.3 %. Thus, recommending implementation of active bed manager 24 hours a day, 7 days a week. In his article (Howell, 2008): Active Bed Management by Hospitalists and Emergency Department Throughput, Howell did a study from November 2005 to February 2006 control period, November 2006 to February 2007 at John Hopkins Bayview Medical Center, Baltimore, Maryland, 335 beds. Study showed that ED Lost revenues from crowding ranges from US$1086 to US$8889 per hour of ambulance diversion, improvement of ED throughput (patient admission decreased by 98 minutes per patient from 458 to 360 minutes , and decrease 6% in ambulance diversion due to yellow alert, and 27% decrease in ambulance diversion due to red alert. Moreover, increase in patient volume and decrease in length of stay and ambulance diversion has been noticed; enhancing of quality of care and therefore patient satisfaction. This study recommends implementation of active bed management: management of hospital and department resources: twice per day bed manager round in ICU pre-diversion round to assess for patient who shall be downgraded from intensive to non-intensive care settings, collaboration with ED physician for decision regarding admission of patient in

the ED to ICU, facilitate safe transfer of patient from ED to appropriate inpatient settings, collaboration with bed director for activation of additional resources. Another study conducted by Neil in 2009 "A New Role for Hospitalist: Bed Czars" (Neil, 2009),15 months intervention period study was done at John Hopkins Bay view Medical Center,335 beds. This study resulted in reduction in diversion ambulance diversion hours and reduction in ED throughput time. Moreover, ambulance diversion (yellow alert) because of overcrowded ED decreased by 6% (from 26 % to 20%), and ambulance diversion because of lack of beds in ICU (red alert) dropped 275 (31% to 4%). Also reduction in patient stay at ED from 458 minutes to 360 per patient minutes has been noticed. This study is suggestive of implementation of 12 hour shift active bed manager 24 hours and 7 days a week: ABM shall round to assess bed availability in ICU, assess ED admissions and triage.

In his article " Hospitalist Bed Management Affecting throughput from the Emergency Department to the Intensive Care Unit " , Howell et al underwent a pre-post study comparing throughput of patient from ED triage to arrival to ICU bed at John Hopkins Bayview Medical Center in Baltimore 335 beds level II trauma adult center , adult burn center, and primary stoke center. The study took place from November 2006 to February 2007 after implementation of intervention November 2005 to February 2006.Decreased ambulance diversion by decreasing throughput time from ED to ICU has been noticed after implementation of Hospitalist Bed Management (Howell et al, 2010). ED function has been improved by decreasing ambulance diversion hours; knowing that for every hour of diversion thousands of dollars is lost as per researches. Moreover, patient volume has increased. Throughput time decreased from 353 to 254 minutes after initiation of ABM for patient needing ICU (99 minutes

per patient). Also it has been noticed improved access and efficiency to ICU beds, Reduced LOS is associated with improved patient outcomes (Howell et al, 2010). Knowing that prolonging time to initiate care is associated with increased mortality; whereas in this study no difference in mortality rate has been noticed (Howell et al, 2010). Furthermore, study showed improved efficiency affected patient satisfaction and safety. This study imply that employing Active bed Management: 24 hours, 7 days: making triage decision for patients needing admission and facilitate transfer to appropriate settings, performing twice daily ICU bed management rounds and performing regular visit to ED to assess flow(Howell et al, 2010).

Another study entitled "A Bed Management Strategy for Overcrowding in the Emergency Department (Barrett et al 2012). This study was done from 2009 till 2010 (12 months 6 months before implantation of intervention 6 months after) at ED where

10,967 patients 221 bed trauma II medical center (Barrett et al 2012). Increased in ED revenue by 2 million $ (41,927,200 was 39,872,200 $) has been noticed (Barrett et al 2012). Also decreased waiting time corresponds to increase in throughput by 10% from 56,960 patients to 59,896 +10.5%) (Barrett et al 2012). Moreover, decreased in LWBS rate by 0.7% and thereafter decrease in diversion ambulances by 11% has been noticed, improvement of hold time from 216 to 103 minutes (52%) thus allowing for staff to care for 2,936 additional patients is also remarked, decreased patient overall mortality (0.07%) from 2.9 to 2.1 (from 2010 to 2010), and increased patient satisfaction due to decreased waiting time at ED from an average of 216 minutes to 103 minutes or by 52% (Barrett et al 2012). This study implies that Implementation of bed management strategy : new post shall be implemented: bed manager with corresponding responsibilities: identifying and assigning empty beds for inpatients within 15 min of

request, maintaining communication with physicians and administration regarding census status , and providing 24/7/356 bed management program (Barrett et al 2012).

3.7.5 Admission cycle at AUBMC

3.7.5.1 Admission cycle at AUBMC ED

The admission process to ED starts by the triage; where the emergency severity index is assessed to determine patient acuity: high acuity patient are admitted to ED1 and low acuity patient are admitted to ED2.Bedside registration fees is done by the assistance of the patient access officers where a patient pays 181,000 Lebanese Lira (LL) per visit and for each extended stay of five hours additional 77,000 LL is being charged. After paying the mentioned fees, the patient is assessed by the ED physician for either receiving treatment and discharge home, or the decision to admit to the ICU where the specialist on call is consulted or the ED patient access. The percentage of boarding at ED from January 1st to December 15th, 2014 is 7.26%. Knowing that 21 diversions from January to September 2014 (no diversion during October and November 2014).

3.7.5.2 Admission cycle at AUBMC ICU

The Current process of admission of patient to ICU, transfer, and or discharge is as follows:

1. The ICU team is consulted by the ED or other specialties (for in patients)
2. The team goes assess, recommend managements, and if the patient needs an ICU bed, we have 2 options:

- We have an empty bed in the ICU ----------patient is admitted

- No available empty bed ----------patient stays in ED or in his/ her current location until a bed is available.

N.B: The bed allocation is coordinated by the different ICU teams (medical/surgical) when having more than one candidate for a single empty ICU bed. All ICU transfers are decided on by the ICU attending physician during the morning multidisciplinary rounds (for both surgery/medical teams).

The patient needs to be accepted by another specialty, if needed, to be taking care of on the floors, after getting this acceptance the patient is assessed by the receiving team before going to the floor with the needed set of orders.

Whereas for the discharge process for patient from ICU there is two options:

1. Discharge home: They are rare in number but we do have patients in need for 24 hours monitoring and then discharged home as any other regular discharge

2. Discharge to other health care facilities: The transfer center is coordinating those discharges

3.7.5.3 Where are the Gaps?

The main gap in the admission cycle at AUBMC occurs in the ED. Delays in admitting patients to a bed on a clinical floor are due to:

- Finding a bed to transfer on another floor to transfer an ICU patient to.
- Delay in assessing the patient by the receiving medical team.
- Awaiting written patient transfer orders.
- Delays while patient areas are thoroughly cleaned following the transfer or discharge of an MRSI patient

- Reluctance of attending physicians to accept patients with multiple complex diseases
- No available step down unit for patients requiringa lower level of monitoring.
- ICU has nine beds where occupancy rate 85% to 95% (shortage of ICU beds)

3.7.6. Financial Impact of Implementation of Active Bed Management

Financial Implication of Implementation of Active Bed Manager turn over in a healthy manner, decreased staff burnout and resignations, which in turn gradually eliminates the necessity to frequently plan a budget training new staff, all of which are indicators of a system that builds bulk revenue and has repaired the leaks (Rabin et al, 2012; Helm et al, 2009; Chand et al, 2009; Tortorella et al, 2012).

Despite not having hard evidence in numbers how much the institutions adopting the new post have gained, they have definitely expressed unanimously that the journey was worth it, as expressed Figure 5.

Figure 5 shows the financial implication of implementation of Active Bed Manager; those are divided into three aspects: increased revenues, cost reduction, and cost containment. Increasing the access to healthcare services leads to increased admission, increased operation throughput and increased resource utilization; thus leading to increased revenues (Helm et al, 2009; Chandet al, 2009; Tortorella et al, 2013).Moreover, ABM has lots of impacts on cost reduction such as decreasing lost revenues of ED walkouts (Mickinney, 2009; Hospitals Network), reducing costs of ambulance diversion (Howell et al, 2008), decreasing the cost of unnecessary triaging

discharge (Chadaga et al, 2012), decreasing the cost of patient care delivery (Johnson & Capasso, 2012), and decreasing crowding and wait time expenses (Johnson & Capasso, 2012). Also embarrassing this new role ABM helps in containing costs such as postponing the opening of new units (McCraigh et al, 2007), preventing expenses related to staff turnover (Helm et al,2009), preventing of excessive hospital costs related to readmissions (Hospital& Health Network, 2007), decreasing readmissions due to medical care in previous ED hold (Howell et al,2010), allocating patients to units with required nursing expertise (Johnson & Capasso,2012), and finally preventing expenses due to inefficient discharges (Hospitals & Health Network,2007).

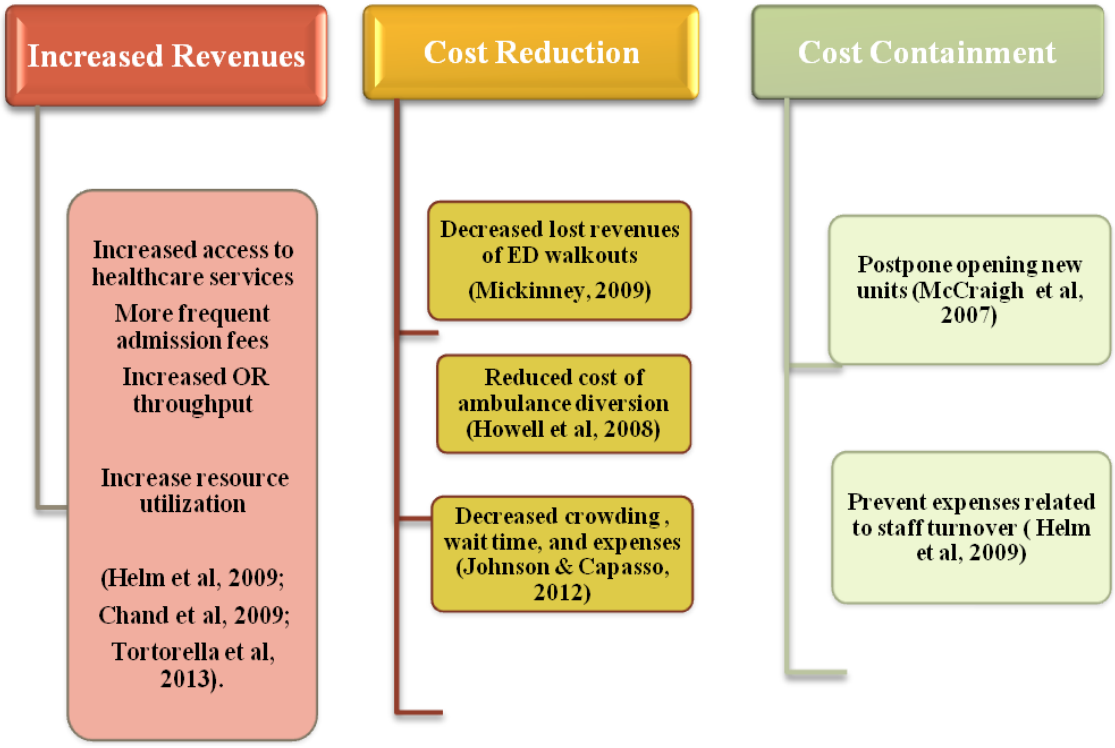

Figure 5: Financial Impact of Implementation of Active Bed Management

3.7 Predicted Increased Revenue

Unlike the measurable expenses that come with the post, the revenues that come due to the post are on a much larger scale. As it has been expressed in the literature review I had conducted, all hospitals who have efficiently activated this post expressed an increased capacity of the institution to accommodate patients by obtaining a new order of bed management via the active bed manager, thus not necessitating obtaining new beds with what follows of expenses from medical supplies, staff and so forth. Proper management of patient transfer from ED implied that the new patients arriving receive optimal care and are appropriately triaged without delay, which decreases expenses on the ED. Be it in funds , medical supplements, or human resources, the institution will be investing its budget in a cost effective management style that leaves room for increased patient turn over in a healthy manner, decreased staff burnout and resignations, which in turn gradually eliminates the necessity to frequently plan a budget training new staff, all of which are indicators of a system that builds bulk revenue and has repaired the leaks (Proudlove et al, 2007; Barret et al, 2012; Howell et al, 2008).

Despite not having hard evidence in numbers how much the institutions adopting the new post have gained, they have definitely expressed unanimously that the journey was worth it.

CHAPTER 4

Introduction of the Active Bed Management Function

4.1 Definition of Active Bed Manager

An Active Bed manager is the allocator and provider of beds, especially in a hospital where beds in specialist wards are a scarce resource (Tortorella et al, 2013; Rabin et al, 2012; Chadaga et al, 2012; Barret et al, 2012; Howell et al, 2009; Howell et al, 2008; Prpudlove et al, 2007; Robinson, 2004; Ricci, 2002). The "bed" in this context represents not simply a place for the patient to sleep, but the services that go with being cared for by the medical facility: admission processing, physician time, nursing care, necessary diagnostic work, appropriate treatment, and so forth. (Gordon & Boaden, 2003).

4.2 Relevance to Vision 2020

The vision of AUBMC is to be the leading academic medical center in Lebanon and the region by delivering excellence in patient centered care, outstanding education and innovative research (AUBMC, 2013).According to this sky rocketing vision of excellence, AUBMC has based its vision on six pillars as such displayed below in Figure 3.

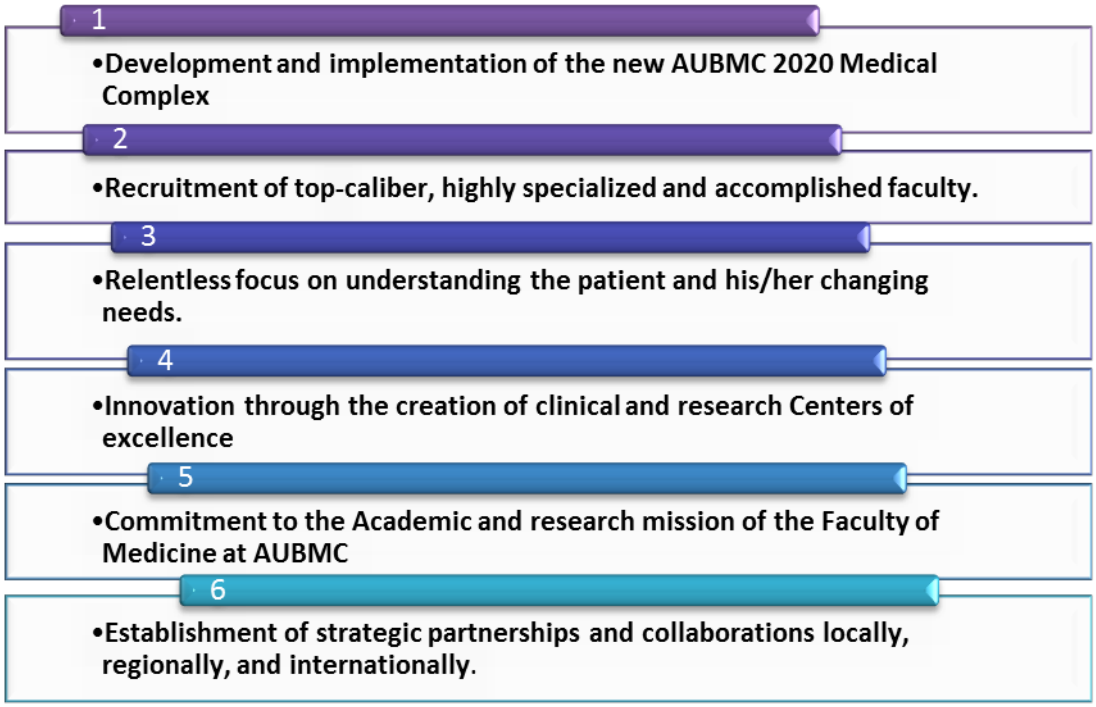

Figure 6: AUBMC Six Pillars Vision

Since AUBMC aims at enhancing the use of its resources to achieve excellence, whilst maintaining a healthy functional academic and clinical research center, the application of this use will be most efficient when applied by someone in the know how. The registered nurses are highly professional staff that at AUBMC have been given the privilege to be entrusted on the delivery of excellence. Starting, but not stopping, at bed side care, the Active Bed Manager is one who knows the vulnerability of the units, and understands the needs of case management, while being a hands-on research resource, for he/ she will be able to squeeze out the best and the most efficient for the benefit of serving the 2020 vision while decreasing unnecessary expenditure and actually causing increase in revenue.

4.3 Why is a nurse required to fill the role?

Active bed management forms an important part of operational capacity planning control, a wider activity concerned with the efficient use of resources (Rabin et al, 2012). Outside the health context, the production/operations function of an organization is concerned with activities such as scheduling and work flow to enable throughput to meet demand, and minimize work in progress and maximize resource utilization (Howell et al, 2008). These tasks are basic day to day assignments that have been introduced to the competency of any registered nurse, and by the time this registered nurse is of sufficient professional experience, as I shall include in the job description, his/her ability to perform these tasks will be fluent, spontaneous, and always brings in a win-win solution to obstacles.

Nurses should fill this role because of the following factors:

1- Their efficiency in handling schedules as befit the day to day workload changes.
2- Their competence at using resources in a cost effective manner.
3- Their commitment to personal/professional development in state of the art patient care mechanisms.
4- The hands-on experience collected from direct bedside care nursing and its effect on decision making/prioritizing/time management.
5- Their fluency at multidisciplinary involvement in what pours into PCC.
6- Their literacy in evidence-based practice.

4.4 Professional and educational post requirements

Since this post is to be entrusted to the Nursing Services, a Registered Nurse is to take responsibility of assuming the position of Bed Manager, which requires having

acquired a Colloquium Degree to ensure Licensure in Lebanon. Since competence and experience allow for better judgment while tackling managerial issues, AUBMC usually keeps a breather while designating the criteria for such positions, which is why the Human Resources usually require the BSN with a specific minimum years of experience in addition to the preference of having acquired an MSN in Nursing or relevant field.

As a member of the AUBMC community, shared governance and nursing involvement in decision making is an inherent building block for the nursing team. Nurses are required and enabled to pursue their professional development and continue their education through The Nursing Clinical and Professional Development Center (CPDC) and through obtaining scholarships to MSN. This educational profile is enriched throughout actual working experience, and units need care coordinators, preceptors, and mentors as icons of leadership on the rise. The need to fit into the position of Bed manager RN requires having achieved a level of efficacy and ease with bed coordination, ease with the digital dashboards available at AUBMC, and an exceptional ability to communicate between the departments to bring optimal bed management results without unnecessary delay.

Moreover, CPDC provides updates from international accreditation councils and offers nurses the opportunity to be parallel to benchmarking medical institutions, and as such it is the role of the Bed Manager RN to remain in line with these updates and be spontaneous and objective in following up on personal educational and professional development.

4.5 Integration of Active Bed Management role

The Active Bed Manager's office will be located in the main AUBMC's Human Resources department. The ABM will work and cooperate closely with the case manager, ED patient access officers, and ED Physicians. The ABM will liaise on day to day basis with the nursing management team: nurse manager, clinical nurse leaders, and nurses. Activities supervised by the ABM will have a collaborative coordination with the nursing management team and Human Resources managers. The reporting channel will be to the Director of Nursing and liaisons with Nursing Leaders.

As for any process of change that occurs within a large institution, resistance lies behind the lack of enlightenment of the use of new roles. As such, the role of the administration at AUBMC is to provide an insightful educational introduction followed by a fluent emerging of the role that the different levels of communication connected with the ABM role can comprehend and smoothly adopt with proper guidance.

4.6. Force field analysis

When analyzing the pros and cons of adopting the role of the Nurse Bed Manager, the following set of variables appears. Under speculative points for doubters, just like any new role, the administrative costs come as a barrier against adopting a role that has no precedent in the Arab region to be able to justify the risk. Moreover, any process of change within a large institution may involve job description confusion related to overlapping of roles, such as ABM with the Case Manager, and resistance of staff towards the process of integration of the role.

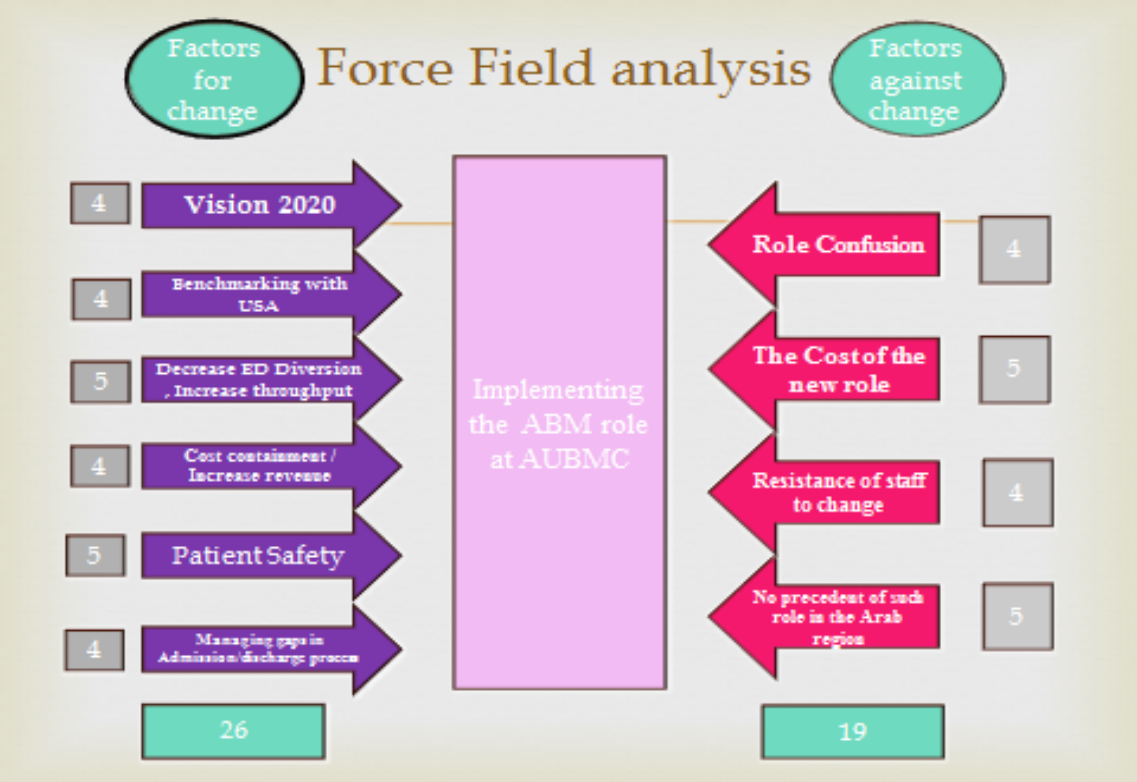

Figure 7: Force field Analysis

The Force Field Analysis for the implementation of the ABM role at AUBMC shows that the factors in favor of the change are stronger than those hindering progress, but the difference between the helping and hindering forces is not large. Thissuggests that considerable action will be required from AUBMC management to reducethe impact of the hindering forces if the role of the ABM is to be successful.

However, the risk is worth the taking due to patient safety being the first and foremost important reason for the existence of our services in the first place. There are a decreased percentage of mortalities and nosocomial infections acquired in the ED setting as resulting to patient hold, a decreased length of stay in the ED for sick patients needing admission, a decreased rate of ambulance diversion with what follows of cost containment. Cutting to the financial aspects, as you will see in this paper I have

discussed many aspects and proofs of projected cost containment, cost reduction, and increased revenue that was harvested by adopting the Nurse Bed Manager role. The ABM role involves integrating state of the art technology in the formula to enhance the admission to discharge process, served by commitment to evidence based practice, and patient centered care.

To make the risk more worth the taking, AUBMC has been a pioneer at initiating roles that pours in the wellbeing of patients from Lebanon and the region by means of facilitating accessibility to medical care and patient education. ABM initiation will function absolutely to the benefit of the MAGNET re-designation journey and serve the 2020 vision that this institution has so proudly founded.

4.7 Overlapping of role of ABM with case manager

A possible difficulty with implementing the role of ABM at AUBMC is the possible perception that the role overlaps with that of the ED Case Manager. There is a potential for overlap in the two roles. There are several approaches that can be used to address this potential problem:

1. The role of the ED Case Manager could be revised with the consent of the incumbent.
2. The ABM role could be introduced on and the demarcation of responsibilities between the post holder and the ED Case Manager resolved on a case-by-case basis before revising both position descriptions based on experience with introducing the new role.

CHAPTER 5

PROJECTED THREE YEARS COSTS

5.1 Estimated salaries and on-costs

As the post has been given Grade 12, the minimum basic salary would be 1750000 Lebanese Lira (LL). As such, we shall add 17% of the annual salary as yearly benefits that come within the contract of such a grade, and shall be calculated yearly over the stretch of three years. However, it may be necessary to re-grade the position to Grade 13 to attract a suitably qualified and experienced nurse.

5.2 Setup costs

The setting within which the RN Bed Coordinator would be shifting between the Nursing Office, where a desk and its requirements shall be instituted along with the desktop and stationary. Yet rounding is a crucial part of the job description. So for financial credibility we aimed at collecting all potential costs to make a reasonable sum for reviewers purposes, since such items are considered budgeted departmentally, excludingthe indirectexpenses of build craft like electricity, water, air conditioning, so on and so forth.

5.3 Estimated education benefits

In the purpose of keeping the holder of this elite post updated on the most efficient means of running the facility, AUBMC offers a 60% scholarship for staff who are continuing their education and taking up higher degree studies. This scholarship will cover 60% of a total of 15 credits per year.

5.4 Estimated Conference leaves costs

AUBMC's 2020 vision ensures that its faculty members remain in tip top shape, and that each post holder will maintain an up to date state of the art state of affairs in connection with similar posts in benchmarking hospitals. As such the RN Bed Manager is expected to be participating in an estimate of two conferences annually, which will serve the purpose of sharpening his/her skills, introducing him/her to up to date means in active bed management and nurse/hospitalist common affairs.

5.5 Total costs

It is expected that total estimated initiating cost: computer and furniture would be 8,000$ as shown in table 1, and ongoing three year cost would be respectively over three years 24,785 $, 25,445 $, 26,133 $ as shown in table 2.

Equipment:	Computer	US$1000
	Printer	US$500
	Computer consumables: (Cartridges, stationary, letterhead, business cards, photography machine, papers)	US$500
Furniture:	Standard office furnishing	US$6000
Total Costs =		US$8000

Table 1:Estimated Initiating Costs

Estimated Salaries and Allowances Costs		**Year One US$**	**Year Two (plus 4% merit increase) US$**	**Year Three (plus 4% merit increase) US$**
Basic Salary		14004	14568	15156
Approved on-costs 17%		2381	2477	2577
Allowances	**1.** Education allowance	5400	5400	5400
	2. Conference/Professional development	3000	3000	3000
Total		**24785**	**25445**	**26133**

Table 2: Estimated Ongoing Three Years Costs

Projected Three-Years Costs	Year One US$	Year Two US	Year Three US$
Estimated Initiating Cost: Equipment and Furniture	8,000	----------	----------
Estimated ongoing cost: Salaries and Allowances Costs	24,785	25,445	26,133
Total	32,785	58,230	84,363

Table 3: Estimated Projected Three Years Costs

The estimated projected three years costs would be 84,363 $ as shown in table 3. Although the number is huge however by knowing that the lost revenues due to ED diversion ranges from $1,086 to $ 8,889(Howell et al 2008), and by having a look over

the ED diversion data at AUBMC for the year 2014 (please refer to Appendix 2), we noticed by calculating the total hours of 23 diversion cases is more than 270 hours of diversion (8 diversion missing data either of starting or stopping or both), so on estimation between $ 293,200 to $ 2,400,030 has been lost.

Chapter 6

Conclusion

6.1 Conclusion

The healthcare industry is an ever evolving planet that carries the hopes and dreams of people who have fortunately come into the light regarding their health, their rights, and their humanity. As contributors to the betterment of this industry, a process of evolving attitudes and mentalities should be initiated to help societies understand that we aim to help, and we need the inevitable chain of change factors of which all major institutions are afraid.

Benchmarking with the hospitals that have preceded us into steps that made patient service better and created a value more priceless to the patient than the word thank you can contain, is the right thing to do. It's always about seeing what worked for the patients, analyzing what it took to happen, and recognizing the cause-effect series resemblance that we have while keeping our visions broad, our minds open, and our consciences clear.

It shouldn't take a wait in the ED for an extra couple of hours, or a dispute over a delayed surgery due to overflow crisis, or even worse, catching a common flu, God forbid, in the ED setting just because those who have the power to cause change didn't reach the extra inch further into development. The problem was described loud and clear, there are no beds in the hospitals to accommodate ED influx of patients, barely ever enough nursing or medical staff, to offer the optimal care they swore their professional oaths to offer. Patients shouldn't have to tolerate the inability of an institution whose sole purpose was to ensure their safety and health but ended up

sending them to the wrong bed because there was none other that fits better, stretching their length of stay as opposing to their right to prognosis. It's against all what the healthcare institution system was built upon to have to send away an ambulance that arrived at the steps of our ED knowing we're the best, just because we couldn't manage.

The Implementation of ABM role shall improve ED throughput and ambulance diversion hours. Moreover, active bed management has enhanced collaborations among physicians in different departments, and physicians with nurses and case managers.ABM role has helped decrease ED crowding by decreasing length of stay of patients which in turn may enhance the quality of care delivered and overall patient satisfaction. Furthermore, ABM role has impact on revenue generation, cost containment, and cost reduction. ABM role shall facilitate the admission process at ED and ICU to prevent delays in transferring/ discharging patients and reduce ED boarding.

Now we have the means, the will, and we have found the way, and that is by investing in the new administrative nursing role as an active bed manager to follow up on influx of patients, availability of beds, priority of pre-scheduling of operating room theatres as opposed to analysis of high season patient influx to the ED, organization of patient discharge, cost effective investment of available resources to bring out the best of what the available solid or human resources can offer, and accordingly update the hospital with the necessary state of the art items that are found of assistance to this purpose, like patient dashboards that we already have at AUBMC ED.

6.2 Enhanced Patient Experience: an Overview

The introduction of the Registered Nurse Bed Manager role will help the organization dodge the inconveniences and fatal ramifications of ED patient flow

discrepancies and will allow AUBMC to introduce a higher revenue resource by saving through cutting off unnecessary losses, to gaining additional patient influx while maintaining a healthy cycle of patient turnover, and boosting its well-earned MAGNET designation and re designation as a pioneer in the Middle East Region.

Since MAGNET is all about enhancing the patients' experience from moment of admission till discharge, it was vital for the creation of the Bed Manager RN position to take into consideration how patients and their perception of their hospitalization experience, will be affected, their feelings about having to wait in ED for someone to see to their needs, and their rightful expectations for their ailments to be recognized and seen to in a timely and dignified manner as suits this institution, and their ability to settle down in a suitable bed to start their treatment. This is what builds the necessary bridge of trust that make all other patients cross over to our institution.

6.3 Recommendations

The project supports multiple recommendations:

1- AUBMC should introduce the role of the RN Bed Manager to improve its patient admission process and multidisciplinary cooperation.
2- The need for change should be well defined and disseminated to all hospital staff to organize the process of offering appointments to applicants.
3- Consultation sessions should be held throughout the hospital to clarify the purpose of the role and its intended effects on the process of patient admission and transfer.

4- AUBMC administration should evaluate the pros and cons of the introduction of the role as compared to benchmarking hospitals in the US before appointing an applicant for the role.
5- A process of evaluating the role of the RN Bed Manager with its consequential effects on the dynamics of patient flow from the ED to the rest of the hospital, especially ICU and specialty units, should be developed by administrative congregation before the appointment of an applicant into the role.
6- An analysis of the contribution of the role to the dynamics of the admission/transfer process and its projections on patient turnover, patient satisfaction, quality indicators, staff and physician satisfaction, and total hospital revenue should be organized on a quarterly basis.
7- The ABM role shall be introduced for the ED and ICU units only in the first instance; and when there is been time to examine the impact of the role on hospital revenues, cost reduction , and improved patient safety has been evaluated to consider expanding the bed manager function to other units in the hospital.
8- Experience with the ABM ED will help to determine how many full time equivalent (FTE) positions would be required to introduce the bed manager function for all clinical units

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APPENDIX A

AMERICAN UNIVERSITY OF BEIRUT MEDICAL CENTER

HUMAN RESOURCES DEPARTMENT

Job Summary- Active Bed Manager

Family: Nursing

Grade: 12 with a starting basic salary of 1750000 LP monthly, excluding benefits.

Department: Emergency Department

Annual Leave: 17 days annual vacation plus 17 holidays in accordance to the national calendar subject to Lebanese law and Ministry of Work

Hour: The holder of this post is considered an FTE (40 hours per week), subject to the needs of the institution

Location: American University of Beirut Medical Center campus

Terms and Conditions: This post falls to with applicable accordance to Lebanese Laws of Employment and Lebanese Order of Nurses.

Accountability: The holder of this post reports to the Director of Nursingand liaisons with Nursing Leaders.

Professional Expectations: The post holder must meet the goals of AUMBC's Mission, Vision, and those of the Nursing Services, to emphasize the values of AUMBC as a MAGNET designated institution.

Minimum Education: Masters of Science in Nursing, with a minimum of five years' experience of care coordination and bed management in a hospital setting.

Job Information

Post Summary: The post holder will be a qualified registered nurse with a valid Colloquium Degree in accordance to the Lebanese Laws of Employment, and a current member in the Lebanese Order of Nurses. Preferably the post holder will be a certified BLS provider as per AUMBC policy.

The post holder will be responsible for the administrative management of bed designation. The RN Bed Coordinator will act as a liaison between internal and external physicians, nursing, Emergency Department, and other patient intake areas to expedite

the appropriate and timely placement of patients. The role coordinates and facilitates the placement of patients using clinical nursing skills and knowledge of clinical care requirements. The post holder uses proactive management in discharge functions for a specialized department/area planning, organizing multidisciplinary rounds, and meeting with the informatics sector regularly to suggest enhancements to the digital patient tracking system as per benchmarking updates.

The post holder will be a member of the clinical mobile bed management team.

The post holder will develop professional good working relationships with staff members on the open and closed units with specific keenness on status of ED staff to ensure effective communication and as such optimal utilization of resources and available beds.

The post holder will be oriented to AUMBC via CPDC guided orientation phase of 3 weeks with the follow up of a preceptor for 10 weeks and a mentor for a year thereafter as per AUMBC employment policy.

Bed Management Responsibilities:

The post holder will have adequate knowledge of unique patient needs and updates on the units and in ED. He/she will follow up on arrangement of multidisciplinary meetings that result in convenient triaging or transfer of patients out of Intensive or Intermediate Care units to medical/surgical units or organize discharge to external facilities as per recommendations of the Attending physicians.

The post holder will follow up on the scheduling of elective surgeries and map trend peaks in ED admissions to organize resources and staffing and prevent surgery delays.

The post holder will be authorized to activate the cardiac catheterization lab when not in use under the supervision of the fellow/Attending.

The post holder will follow AUMBC policies and guidelines as per the following:

1. Assess the needs of internal/external customers according to established professional standards and institutional guidelines/policy/procedure.

a. Patient data is accurately maintained, used for trending, and used to guide planning.

b. Information related to resource use/needs is provided to the appropriate manager to assist with budget preparation and cost management initiatives.

c. Assessment of patient needs is ongoing to enable proactive planning.
d. Serve as a clinical resource to internal and external customers to assure timely and appropriate placement of patients into beds.
e. Maintain current knowledge of policies and procedures, and regulatory requirements.
f. Continuously strive to understand, anticipate, and meet the needs and expectations of internal and external customers recognizing special circumstances that may impact the placement of patients.

The post holder will be required to balance the demand for emergency admissions against an optimal level of elective activity to prevent evitable cancellation and delays.

The post holder will consider gender related segregation as per the necessity of respect to the cultural diversity and unique needs.

The post holder will work closely with the Patient Access Officer and the fellow mobile bed management team to ensure 24 hour coverage of immaculate active bed management.

The post holder will follow up on staffing issues to ensure efficiency and continuity of care.

The post holder will contribute to the positive image of AUMBC by applying rules of courtesy and respect to all staff members, visitors and service users.

The post holder will be updated on the policies regarding incident reporting and follow up on action plans and feedback related to these incidents with the corresponding departments.

The post holder will attempt at all times to locate gaps in the active bed management cycle and attempt to rectify mishaps on an ongoing basis using all possible resources after conducting the necessary consultations with the mobile bed management team and AUMBC administrators.

Maintain an accurate bed state, including updating Patient Administration system and patient tracking.

Ensure comprehensive and accurate time/location data related to utilized beds available for daily and weekly multidisciplinary active bed management team meetings.

The post holder is expected to tackle the above list of expectations within the frame of Lebanese Laws of Employment and only after completion of the orientation and training period.

Clinical Responsibilities:

The post holder will be responsible for maintaining effective line of communication with all units and assist nurses on duty to facilitate the transfer.

The post holder will be accountable for applying judgment regarding assessment and evaluation of patients triaged or transferred.

The post holder will use evidence based practice and promote resources to assist nurses on duty apply it in their clinical setting

The post holder will maintain current clinical competencies required and develop further clinical competencies as required by the position.

The post holder will present a positive role model and resource for junior nurses

The post holder's working hours and shifts are subject to the needs of the institution

The post holder will coordinate closely with the care coordinator/ in-charge in ED to ensure optimal allocation of resources and vacant beds for ED patients

The post holder will be cross-trained in all the areas necessitating intervention in active bed management.

Educational Responsibilities:

The post holder will maintain an objective self-assessment of educational needs and seek validation of necessary skills; the post holder will seek education and competency validation on all necessary skills without supervision, example new computer applications.

The post holder will be able to pose as a preceptor and mentor to new members of the bed management team.

The post holder will participate in designing an efficient orientation of the new members of the bed management team.

The post holder(s) are responsible in meeting their own clinical and educational requirements as per AUBMC policy.

Professional Responsibility:

The post holder will adhere to the AUBMC code of conduct and abide by code of ethics as per AUBMC policy

The post holder will consistently show professional accountability in following up on his/her own educational needs and validations.

Clinical Governance:

All staff with clinical responsibilities are expected to work within the clinical expectations of AUMBC's mission and vision; this is through following up on their education, adopting evidence based practice and promoting optimal clinical efficiency through research and positive use of resources. All staff members will follow the instructions and educational schedules of the CPDC department, and as such are

expected to provide excellent patient-centered care and stand out as an advanced academic resource in the region. Such is brought about by:

- Adherence to JCI requirements and MOH
- Patient and user involvement
- Quality management and PIs
- Continuous professional development
- Clinical research in accordance with NDNQI
- Infection control

Data Protection:

Since the post has access to a bulk of personal patient information and demographics, it is vital that confidentiality be part of the professional demeanor expected from the post holder, who is held responsible for any breach in information via verbalization, writing, or access to information not relevant to a bed management requirement. Data disclosure, when such is required, will only be to specific personnel with common professional interest and authority in acquisition of such information. Any breach in confidentiality will be subject to disciplinary measures as dictated by AUMBC policies and guidelines

Equal Opportunities:

This job is entitled to those chosen only according to competence, education and clinical criteria, with no reference to ethnic background, religion, sect, race, gender, or sexual orientation since these factors are of no consequence to the clinical value of the applicant.

No Smoking Policy:

The post holder will understand, abide by, and educate on the no smoking policy within AUMBC campus except for the areas designated for smokers. Any breach in this policy will be subject to disciplinary measures as per AUMBC policies and guidelines.

APPENDIX B

Ambulance Diversion from AUBMC ED - Calendar Year 2014

Diversion START Date	Start Time	Diversion END Date	End Time	Diversion Duration
Monday, January 13, 2014	8:30 AM	Tuesday, January 14, 2014	3:00 PM	31:30:00
Monday, January 20, 2014	11:00 AM	Tuesday, January 21, 2014	8:00 AM	21:00:00
Monday, January 27, 2014	8:00 AM	Tuesday, January 28, 2014	8:00 AM	24:00:00
Monday, February 03, 2014	10:30 AM	Tuesday, February 04, 2014	12:00 AM	13:30:00
Monday, February 17, 2014	8:20 PM	Tuesday, February 18, 2014	10:30 PM	26:10:00
Monday, February 24, 2014	1:30 PM	Tuesday, February 25, 2014	8:30 AM	19:00:00
Wednesday, February 26, 2014	9:10 PM	Thursday, February 27, 2014	7:00 PM	21:50:00
Tuesday, March 04, 2014	11:00 PM	Wednesday, March 05, 2014	2:00 PM	15:00:00
Wednesday, March 05, 2014	11:45 PM	Thursday, March 06, 2014	10:00 AM	9:45:00
Monday, March 17, 2014	11:30 PM	Thursday, March 20, 2014	3:30 AM	52:00:00
Monday, April 07, 2014	8:30 PM	Monday, April 07, 2014	10:00 PM	1:30:00
Tuesday, April 22, 2014	1:00 AM	Tuesday, April 22, 2014	8:00 AM	7:00:00
Tuesday, June 17, 2014	9:00 AM	Tuesday, June 17, 2014	6:00 PM	9:00:00
Thursday, June 19, 2014	3:00 AM	Thursday, June 19, 2014	9:00 AM	6:00:00
Monday, September 15, 2014	9:00 PM	Tuesday, September 16, 2014	9:30 AM	12:30:00
Total hours				**270 hours**