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Educating Nurses on the Use of Bedside Mobility Assessment Tool (BMAT) through E-learning/Online Education Module

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Introduction

Majority of people might think that construction or manufacturing sites should be the most hazardous workplaces. Surprisingly, none of them is correct; instead, the most hazardous workplace is hospital setting. According to the data from Bureau of Labor Statistics, in 2011, there were over five thousands employees who had work-related injuries at US hospitals, and most of them are nursing assistants and orderlies. It also found that the top reason that causes the injuries was due to over-exertion or bodily reaction (2013). The study from Occupational Safety and Health Administration (OSHA) discovered that the following factors result in the high injury rate among the nursing workforce: the high frequency of lifting, reposition and transferring patients, the ethical duty of doing no harm makes them always to put patients' safety and health in priority, and the unpredictable events which require them to react immediately. Meanwhile, the aging nursing workforce who is more vulnerable to musculoskeletal injuries, and increase in the number of patients suffering from obesity puts the nursing staff at greater risk for injury (2013).

Despite the challenges in hospital environment and the other contributing factors, hospitals in general have no taken the aggressive actions on the injury issue among the nursing employees. Based on the interview with the senior associate director of federal relations and a lobbyist for the American Hospital Association, Carla Luggiero, there are only a few hospitals who are reacting the issue by implementing safe patient handling, but the majority of them are slow to change. For some the staff injury is not a priority issue and others believe the old myth that hospitals are safe place to work. Moreover, she brought the light the notion that nursing staff

is considered as second-class and disposable labor force in the hospital industry. Therefore, the issue of injury among nursing staff has been present since 1898 (Zwerdling, 2015).

However, while the hospitals are failing to address the issue, there are significant financial consequences both in staff and patient injury costs. According to the study, the average cost of a worker's compensation claim for a hospital injury is \$15,860 between 2006 and 2011. The cost of replacing a new employee is estimated around \$27,000 to \$103,000 (Li & C.B, 2012). Additionally, there is not only a financial cost but also a high turn over rate from prolonged stress, and a low productivity during recruiting, hiring, orientating and training period (Aon Risk Solution, 2012).

Statement of problem

In 2012, State of California took action to protect the healthcare workers by passing the Hospital Patient and Healthcare Worker Injury Protection Act, which requires hospitals to implement a Safe Patient Handling and Mobility (SPHM) policy as part of an injury and illness prevention program (Department of Industrial Regulations, 2016). In order to implement the SPHM program efficiently, OSHA recommends the collaboration with disciplinary teams and determines the following essential components to achieve the goal: perform a needs assessment, obtain equipment, provide education and training, and evaluate the program (2013).

Bedside Mobility Assessment Tool (BMAT) is the latest evidence based practice, reliable and valid tool, which helps nurses to assess the patients' current and ongoing mobility and to determine an appropriate use of equipment. From a broader perspective it increases staff awareness, education, and training around patient assessment, preventing staff injuries and patient falls and achieving better patient outcomes (Boynton et al., 2014).

However, although BMAT is considered the ideal nursing assessment tool to accomplish the goal of SPHM, it is difficult to implement a new practice or to establish a new program in hospital settings. Due to the heavy nursing workload, it is difficult to take even a short break, having additional time to learn or to adopt a new practice is truly challenging. Moreover, hospitals have been struggling to provide effective education to their staff due to time, space and financial constraints. They oftentimes provide the curriculum which tends to be massive in the volume of information and lacks engagement. Therefore, it is critical for the hospitals to develop the educational tools and teaching methods which would fully promote the active learning and the knowledge retention in order to establish the new practice.

Rationale

The hospital identified for this BMAT project is a 450-bed, acute and comprehensive care, non-profit hospital. There are approximately 1,500 nurses in 21 units at this magnet-recognized hospital. In 2015, the hospital reported 46 injuries related to SPHM among its nursing staff. Although three percent might be seen as a low injury rate, the cost is significant not only to the hospital but also to the employees. The hospital found that most of the injury occurred on the medical, patient care resources and telemetry/stroke units. Among the units, the critical care unit is the one with the significant amount of SPHM injuries. In order to assess the root cause of the problem, nursing staff's behaviors regarding assessment of patient mobility and their knowledge of equipment and assistance devices were observed on the following units, two medical-surgical units, the telemetry/stroke unit, and the critical care unit. Meanwhile, the medical surgical unit, telemetry unit, mother and baby unit, and labor and delivery unit were included for assessing equipment access and availability.

The assessment data on nursing staff regarding SPHM from the units showed lack of standardize nursing to patient mobility assessment, status about patient mobility oftentimes not being included during report handoff, communication gap on patient mobility between clinical nurses and clinical nurse assistants. Additionally improper body mechanics were found frequently used during patient handling events, and unfamiliarity and hesitancy with the use of the lift equipment and assistant devices. Moreover, majority of nursing staff relies on patient or family members to report patient's mobility status, but this information cannot be reliable, especially when the patient has cognitive impairment or he/she is not aware of his/her body in decreased mobility of deconditioning from the disease or surgery. Meanwhile, the data on equipment assessments regarding SPHM showed that all units are in shortage either lift equipment or slings, except for walker, which are easily found in every patient room. Additionally, the storage rooms for the equipment was found not access friendly and not well organized. Majority of the equipment was lack of instruction reference and poorly labeled. Time trials on the amount of time staff needed to transport equipment from the storage locations to the farthest patient room was discovered to be one minute and thirty-eight seconds. (All the assessment data on nursing staff and equipment can be found in Appendix A)

Based on the assessment data, it shows that the existing SPHM policy at the hospital has much room for improvement. It does not provide the reliable information for nursing staff to fully acknowledge patient's overall mobility level, and it is unable to help them to identify which equipment is appropriate for certain patient mobility level. Therefore, this perspective paper is focusing on the need for educating nursing staff on BMAT. Additionally, in order to enhance the staff's learning outcome, hospital has to seek a new educational approach, which can succeed in effective staff learning.

Literature Review

In recent years in healthcare there is increase in innovation. Thus there is a need and opportunity for healthcare professionals to update their knowledge and skills to enhance clinical practice (Gresty, Skirton & Evendon 2007). In order to establish BMAT efficiently at an acute care setting, it is critical to develop the educational methods which would maximize engagement and knowledge retention and to construct a strategy which would promote the transition of BMAT into clinical practice. Due to the time, space and financial constraints, hospitals nowadays have been struggling to develop the efficient educational delivery methods. However, on the other side, the rise of technology has been facilitating various performances and patient care in the healthcare industry. Many hospitals integrate technology in employees education (Hill, 2016). Electronic learning, also known as e-learning is described as “integrating information technology into the learning/teaching process, using materials delivered by the internet” (Glen, 2005). It has become the natural solution to overcome the existing constraints and has grown rapidly in healthcare industry. Although it was questionable whether e-learning is effective in engagement and retention of knowledge, its multi-functional characteristics are found to be useful. Research show that e-learning is able to provide the flexibility and accessibility for nursing staff, who oftentimes has heavy working schedule. They can choose the appropriate time and environment for their educational training. As a result their learning acquisition increases significantly because the learning is conducted in their preference time and space. (Blake, 2009). Moreover, comparing to the traditional setting, the online education is viewed as self-guided, rather than receiving the knowledge passively from one side, learners can choose their own learning paths based on their preferences. They can pause the module to give

them time to absorb the materials, and they are often required to interact in order to complete the modules. As the result, e-learning helps the learners to retain the knowledge and to maintain the engagement in a much efficient way (Feng et al., 2013).

Some critics doubt that online educational modules may cause lack of hand on experience which can negatively impact on the healthcare professionals' clinical practice. Even though there is no doubt that e-learning cannot substitute the hand-on experience for health care training, e-learning can still enhance the hand-on skill with videos, scenarios, case-studies or gamifications to keep the learners engaged. Moreover, researchers found that it is less likely for those healthcare professionals to have difficulty to maintain the hand-on skill through e-learning, because these clinicians oftentimes already have acquired the skills from their practice or had the pre-existing knowledge. As the result, they could still adopt the skills efficiently without hand-on experiences (Ogrinc et al., 2004). However, the literature does show that online educational module tailed to the learners based on their characteristics, background and proficiency will have the most influential on overall learning outcomes; therefore, it is appropriate to implement online educational learning to adult learners in the nursing profession (Lahti, Hatonen, Valimaki, 2014).

Project Overview & Methodologies

Based on the unit assessment, BMAT is chosen to be the new clinical practice for SPHM. In order to establish BMAT on the unit successfully, e-learning plays an essential role in knowledge foundation and learning motivation. First of all, it is important for the nursing staff to understand the rational behind BMAT and draw their attention to the new practice. Due to time, space and cost constraints which prohibited outside of work time in person education, an online educational module (Appendix B) is chosen to be the suitable method to initiate the first

exposure of BMAT to the nursing staff. Employee who takes the online educational module gets the one-hour incentive. They are given one month to finish the module and are expected to implement BMAT on the unit afterward. Moreover, the online module is initially implemented on a small scale, starting on post-surgical unit where the patients have higher fall risk and need assistance for mobility. It is easier to identify the problems and to make modifications on the microsystem level.

The module is designed to be interactive, which promotes the engagement and knowledge retention from the learners. It begins with the story of employee injury from improperly lifting patients overtime at the hospital where the nursing staff works at. Rather than presenting the statistics of the employee injury in healthcare industry, the incident of colleague represents stronger impression, evokes learner's attention and leads to the idea of urgency in implementation of BMAT. After introduction, the module shifts to the education on BMAT. The original version of BMAT (Appendix C), which is created by Banner Health, is revised to clear instruction with key points and structural guidelines (Appendix D). The significant change is the splitting of step four into two separate steps: March & Step and Walk. This modification helps the nurse to differentiate between patient's ability to walk a few steps and to ambulate independently for an appropriate distance. In addition, the 150 feet walking distance is required by Medicare to assess patient's mobility function (RTI International, 2014). Other changes corresponded to the use of equipment based on the level of BMAT (Appendix E).

The overall content in the module is presented in dialogue format with color photos or graphics, which helps to draw the learner's attention and promote the quality of learning. After the knowledge section of BMAT, there is a slide indicated the regulation on SPHM which reinforces the importance of BMAT in clinical settings. The second portion of the module is

emphasis on knowledge application with scenarios. The module can only continue if the scenarios are answered correctly. This method requests learners to use the knowledge learned from the first portion, and it also enhances the knowledge retention from practicing multiple scenarios. Moreover, there are videos showing BMAT assessment steps and the correspondence of equipment use (Appendix F), and they are considered to further promote the engagement and to strengthen the knowledge with the learners.

Expected Result

In order to help the staff to continuously obtain the latest clinical practice and knowledge, health care institutions have been striving to develop educational tools which will lead to the optimal learning outcomes. The online educational module is introduced in healthcare industry to overcome the existing constraints, including limited time, restricted space and financial cost. For the BMAT project, online module not reduces the financial burden significantly. The hospital does not need to pay overtime for learning time outside of work. This also provide opportunity for learning to those who would have otherwise not been able to learn due to their schedule or other obligations. Since the training is online, hospitals can save time and effort on scheduling the rooms for the training. Additionally, online module plays an important role in environmentally friendly movement since all the documents are e-files and help to reduce the use of natural resources.

In terms of leaning outcomes, the structure and content in online educational module replaces the traditional educational approach from passive learning to active learning. After taking the online module, the staff will be able to identify the reasons behind the implementation of BMAT and to realize the need of changing the current practice for better patient care and

employee safety. E-learning can promote the learners' self motivation, unlike the rote memorization from traditional education. Moreover, e-learning can be more effective in knowledge retention than in-class learning. It helps the learners to choose their own pace, so that they can have time to absorb the materials. The requirement of answering the right choice from the learners is to promote the engagement, so it keeps them to apply the knowledge learned from the module.

In clinical performance, the online educational module will help the nursing staff to understand the purpose of implementing BMAT and to bring BMAT into the clinical practice for improving employee safety and patient care. BAMT will be the foundation tool for the nurses to assess or to have a better understanding with patient's mobility level. The assessment tool gives them a reliable knowledge from patient's physical movement, so they will have better clinical decisions on mobilizing the patients. Clinical nurses will have the sufficient knowledge of assessing the patient's mobility by following the steps in BAMT and integrating their nursing judgment for checking patients with complicated physical conditions. They will also know the contraindications for BMAT and understand the reasons why they cannot perform BMAT on the patients with certain conditions to prevent potential injury to the patients. Although clinical nurse assistants (CNAs) are not responsible to assess patient's mobility level, they can use BMAT as a mobility checklist to help them have better knowledge of patient's mobility prior to further assisting the patient. Once they have the knowledge about patient's mobility status by following the instruction on BMAT, they can transfer the information, which is more tangible and easy to understand, to the clinical nurses. Patients will have consistent care due to the standardize mobility assessment tool used by health care teams.

Besides, BMAT is beneficial not only to minimize the fall risk but also to reduce the employees' injury from mobilizing patients. Once nursing staff determines the BMAT level, each level is corresponding to recommended equipment. The equipment guide provides safer and strong clinical decision for mobilizing the patients based on their BMAT levels. The equipment recommended from BMAT is based on the current equipment used at the hospital and is determined by the interdisciplinary team. It also prevents the staff from over-exertion or bodily reaction due to lack of knowledge of equipment use or inappropriate equipment selection. Overall, BMAT reinforces the insufficient knowledge on current SPHM and initiates the idea of assessing patient's mobility level based on the latest evidence-based researches. It emphasizes not only the importance of evaluating the mobility level from structural approach to have strong knowledge but also the use of equipment to promote safe patient physical handling.

Nursing Relevance

The use of technology will be growing continuously in healthcare industry. It is essential for the leaders to obtain the knowledge about technology and to implement it for increasing overall working or patient care quality in healthcare settings. E-learning is one of the latest technologies and is recognized for improving learning outcome in healthcare professionals. As a clinical nurse leader (CNL), it is important to recognize the productivity of e-learning and to integrate with the existing resources to maximize its efficiency. CNL will need to understand the available tools, workforce, workload, working environment and culture in order to develop a suitable strategic plan to conduct a change at the specific unit or department.

However, it is difficult to implement changes in healthcare industry in general, and it is critical for CNL to have the competencies in various areas. In the project of implementing

BMAT, CNL plays a significant role of performing a comprehensive microsystem assessment to identify the problems, using evidence-based researches to design solutions that emphasize the trends in safety and quality in microsystem level, maintaining effective and clear communication to delivery message, collaborating with other healthcare providers in the professional manner and developing a strategy which is cultural suitable in the specific healthcare environment (American Association of College of Nursing [AACN], 2013).

Summary Report

The BMAT project is a group work which has begun since CNL cohort 17. Six students from CNL cohort 19 worked on BMAT project during the fall semester in 2016. The objectives for current group are initiating online educational module in the educational system at the assigned hospital, training “SuperUsers” on BMAT and implementing “Just-In Time” training on the assigned unit. This effort represents the implementation phase for the BMAT project. There were several challenges that were encountered during this phase. Since it was students’ first time working at the assigned hospital, they were unfamiliar with the culture and the working environment on the unit. It was a challenge to implement BMAT efficiently without the adequate knowledge of who is in charge of which sectors and what the working pattern, workforce and workload are on the unit. Collaboration and communication between students and the other health care professionals were the other crucial factors during the implementation phase.

Students attended staff meetings to introducing themselves and had the BMAT trainings with the physical therapist. During the training sessions with the physical therapist, students had the chance to familiarize themselves with the staff and to observe the overall working environment and culture on the unit. They also had the exposure to the equipment which are

currently used on the unit and learned the significant role and function each device is. In terms of reinforcing the collaboration and the communication nurse manager and educator on the floor played a crucial role. Students updated plans regularly through in-person meetings and emails with the nursing managers. The beginning of the in-person meetings not only strengthened the relationship and established the trust with the staff but also helped to fill the knowledge gap about overall working environment on the unit and devised the strategic plan, which would promote the BMAT implementation efficiently.

The online educational module was officially introduced in the educational system on October 5, 2016, and the total 65 nursing employees were expected to be completed the module by November 5. The nursing staff, including clinical nurses, clinical nurse assistants, nursing educators, license vocational nurses, clinical managers and bariatric nursing specialist, are assigned to the online module. Although the due day for completing the module is not mandatory, 51 out of 65 of nursing staff has finished the module in the expected duration. 3 out of 14 people did not finish the module due to the technical issues, and the rest was due to the time constraint. From the verbal feedback, majority of the participants have positive review on the online educational module. They feel that the length of the module is tolerable, and the instruction is clear to follow and to understand. Additionally, majority of the staff agrees the use of BMAT, which truly helps them to assess the patient's mobility level and guides them to the appropriate selection for the equipment. On the negative side, the staff felt the module did not address much on BMAT use in patients with certain physical conditions, which are common seen on the unit. We recommended that the online module should include BMAT use on other scenarios, such as knee/hip surgery and femoral/back injury, in video format. The scenarios would help the staff to build strong knowledge on the patients with surgical conditions or certain

physical requirements and assist the staff to apply the knowledge from the online module setting to the clinical practice. Additionally, one of the students from the next BMAT group should collaborate with the team, who is responsible for assembling the materials in the system, to ensure the module is in the appropriate format in order to provide the effective learning.

The pre/post BMAT survey (Appendix J) and self-assessment survey (Appendix K) were also implemented to analyze the staff's knowledge acquisition from the online educational module and their change of confident level in SPHM after the implementation of BMAT. Both surveys are attached together with both sides and fifteen questions in total. The surveys were located near the manager's mailbox but there were not many pre/post-BMAT and self-assessment surveys filled out by the nurses. The majority of the nurses were occupied by the workload, or they were not willing to spend time on it. Therefore, there was not enough data to analyze the efficiency of online module and the change of clinical practice in SPHM. Due to time constraints for this semester the survey was not attached to the online module. The recommendation is to include pre/post BMAT and self assessment surveys with the module in the educational system. It will be easier to collect reliable and solid data and to evaluate the staff's learning outcome and their clinical practice change in SPHM after learning BMAT.

In conclusion, BMAT project is a unique learning experience. Unlike clinical rotations emphasizing on nursing care, the project mainly focuses on the strategies in how to implement an evidence-based practice which would help to improve patient care or clinical practice in the microsystem level. It was a valuable opportunity to learn the capacity of collaborating and communicating with the multiple health care professionals. This experience gave students the initial exposure to work as a CNL, who is responsible to strengthen interdisciplinary collaboration through communicating, planning and implementing care directly with individual

health care professionals in a complex health care environment. By doing BMAT project, student learned how to propose a change from initial assessment, planning, implementing to evaluation phases. Since BMAT project has been a continuous collaboration throughout different cohorts, the communication is one of the important elements to ensure the project proceeded efficiently. CNLs play critical role in integrating the evidence-based research with particular microsystem. They need to have the knowledge of the working environment and the culture at the clinical setting in order to develop an optimal strategy for BMAT. In the health reform era, CNL plays a critical role not only in creating best practice with high quality outcome for patients but also in strengthening leadership in incorporating with diverse professionals to support positive change.

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Appendix A

Mobility Assessment Data By Unit							
Unit Observed	# Patients Observed	# of Mobility Assessments Observed	Mobility Given in Report	Patient Asked About Mobility	# Patients Ambulated / Moved	Equipment Used to Mobilize Patient	Appropriate Equipment Used
2C (Medical)	26	0	8	1	10	5	3
3C (Stroke/Telemetry)	23	6	0	0	8	6	1
4A (Medical-Surgical)	25	2	0	1	15	12	9
CCU (Critical Care Unit)	3	0	0	0	1	0	0
Medical-Surgical LG	8	3	1	0	4	1	1
Totals	85	11	9	2	38	24	14
Percentage		12.94%	10.59%	2.35%	44.71%	63.16%	58.33%

Type of Equipment Used on Each Unit								
	Walker	Percentage	Wheelchair	Percentage	Portable Passive Lift	Percentage	Mechanical Sit-to-Stand	Percentage
2C (Medical)	3	11.54%	0	0.00%	0	0.00%	0	0.00%
3C (Stroke/Tele)	6	26.09%	1	4.35%	0	0.00%	0	0.00%
4A (Med-Surg)	7	28.00%	0	0.00%	0	0.00%	0	0.00%
Critical Care	0	0.00%	0	0.00%	0	0.00%	0	0.00%
MS Los Gatos	1	12.50%	0	0.00%	0	0.00%	0	0.00%
Total	16	18.82%	1	1.18%	0	0.00%	0	0.00%

	Non-Mechanical Sit-to Stand	Percentage	Z-Slider	Percentage	Ceiling Lift	Percentage	Hovermatt	Percentage
2C Medical	0	0	0	0.00%	0	0.00%	0	0.00%
3C Stroke/Tele	0	0	2	8.70%	0	0.00%	0	0.00%
4A Med-surg	0	0	0	0.00%	1	4.00%	4	16.00%
Critical Care	0	0	3	100.00%	0	0.00%	0	0.00%
Los Gatos	0	0	0	0.00%	0	0.00%	0	0.00%
Total	0	0.00%	5	5.88%	1	1.18%	4	4.71%

Mobility Assessment Data for All Units						
	# of Mobility Assessments	Mobility In Report	Patient Asked About Mobility	# Patients Ambulated / Moved	Equipment Used to Mobilize Patient	Appropriate Equipment Used
Percentage	5.88%	10.59%	2.35%	44.71%	63.16%	58.33%

Equipment Usage Data for All Units								
	Walker	Wheelchair	Portable Passive Lift	Mechanical Sit-to-Stand	Non-Mechanical Sit-to-Stand	Z-Slider	Ceiling Lift	Hovermatt
Percentage	18.82%	1.18%	0.00%	0.00%	0.00%	5.88%	1.18%	4.71%

Appendix B

BEDSIDE MOBILITY ASSESSMENT TOOL (BMAT)

An Educational Module for Nurses

Learning Objectives

By the end of this presentation, the learner will be able to:

- Explain the purpose of using the Bedside Mobility Assessment Tool (BMAT)
- Demonstrate how to conduct each step of the BMAT
- Correctly assess patients' mobility level using the BMAT
- Identify the correct equipment and/or assistive device to use for each BMAT level

An El Camino Nurse's Story

"I've always been busy for HR, and most want to help for others. I got get a lot of... [text continues]

The Purpose of BMAT

BMAT:

- May reduce in-hospital falls
- May reduce nursing injuries related to patient-handling
- Is a nursing tool that recommends equipment for safe patient transfers and mobility
- Standardizes care related to the risk of patient handling and falls

Did you know the maximum amount of weight a healthcare worker should exert when assisting a patient with mobilization is 35 lbs?

Contraindications for BMAT

- Bilateral extremity non-weight bearing
- Strict bed rest
- Unable to follow commands

STEP 1: SIT AND SHAKE

Assess if the patient can:

1. Sit themselves up on the edge of the bed from a semi-reclined position with feet flat on the floor or stool and maintain balance.
2. Reach across midline and shake clinician's hand. Assess bilaterally. (Note: ability to shake with one hand still sufficient to proceed.)

Did You Know? If it is unclear if a patient is using their arms to stabilize themselves while sitting, do an observed trial of a patient's walk.

YES: Proceed to Step 2
NO: Patient is LEVEL 1, Total Assist

STEP 2: STRETCH AND POINT

Assess if the patient can:

1. From a seated position, straighten one knee and hold for 5 seconds.
2. Flex the ankle and point the toes towards the ceiling. Assess bilaterally.

Note: Assess leg(s) that patient intends to stand on; one leg is still sufficient to proceed.

YES: Proceed to Step 3
NO: Patient is LEVEL 1, Total Assist

LEVEL 1: TOTAL ASSIST EQUIPMENT

Available Assistive Use for Mobilization, Transfer, Weight of Major Personnel

STEP 3: STAND

Assess if the patient can:

1. Stand up from chair or bed and hold standing position for 5 seconds.

Note: Use assistive device if prescribed, used at home, otherwise indicated.

YES: Proceed to Step 4
NO: Patient is LEVEL 2, Maximum Assist

LEVEL 2: MAXIMUM ASSIST EQUIPMENT

Mechanical Overhead Transfer (e.g., SABA Plus, Hoist Assist)

STEP 4: MARCH & STEP

Assess if the patient can:

1. March in place (5 times/leg)
2. Take a step forward and return each foot to original position. Assess bilaterally.

Note: Use assistive device if prescribed, used at home, or otherwise indicated.

YES: Proceed to Step 5
NO: Patient is LEVEL 3, Moderate Assist

LEVEL 3: MODERATE ASSIST EQUIPMENT

Non-mechanical Sit-to-Stand

STEP 5: WALK TEST

Assess if the patient can:

1. Walk at least 20 feet safely without loss of balance, without assistance, and without assistive device.

Note: If patient uses walker for Step 4, do not attempt to ambulate without walker. The highest mobility score this type of patient can get is a 4. (Assess patient walking with walker to assess endurance and safety awareness.)

YES: Level 3, Moderate Assist
NO: Patient is LEVEL 4, Minimal Assist

LEVEL 4: MINIMUM ASSIST EQUIPMENT

Cane, Gait Belt, Walker, Crutches, Stairlift, Full Protection Chair

Summary of Mobility Level

Mobility Level 1	Total Assist: patient unable to sit on the side of the bed or edge of chair.
Mobility Level 2	Maximum Assist: patient can sit, shake with at least one hand, stretch and point with at least one leg, but is unable to stand.
Mobility Level 3	Moderately dependent: patient can sit, shake with at least one hand, stretch and point with at least one leg, able to stand (5 sec), but unable to march or step.
Mobility Level 4	Minimal assistance: patient passed all previous BMAT steps, including March and Step, but requires assistance and/or assistive device.
Mobility Level 5	Independent: patient passed all previous BMAT steps, and is able to walk at least 150 feet with a 5. The same when walking with assistance and assistive device.

Tips for Surgical Patients

For patients with any condition that prevents a patient from coming to a sitting position independently (e.g., incision, cast, brace, large abdominal/orthopedic resections, etc.), there may be additional accommodations to only assist the patient with the assessment of BMAT.

Getting the Patient to the Edge of Bed (Option 1): The safest transfer to sit

- Use hand controls to assist raising HOB and allow patient to see side of bed as needed.
- For patients with manual restraints, instruct the patient to call for help and assist with their balance, and then lower their leg.
- May often use hand to patient for balance or pressure, but if patient is pulling or reaching from request, consider option 2.

Tips for Surgical Patients

Getting the Patient to the Edge of Bed (Option 2): Sit Assistance

- Position caregiver or transfer assistant behind the patient and secure the gait to the chair or stool to the patient's feet.
- Transfer sitting position to the edge of bed as needed.
- Once patient is positioned safely at the edge of the bed, secure the gait to the chair or stool to the patient's feet to ensure the gait and transfer is able to maintain sitting position with the assessment.

Did you know?

According to Cal OSHA Safe Patient Handling Regulation, a health care worker can refuse to lift, reposition, mobilize or transfer patients if concerned about patient or staff safety or lack of trained personnel or equipment, and shall not be subjected to disciplinary action based on this refusal.

The safety of you and your patient is vital!

The health care worker should communicate concerns regarding the designated activity to an appropriate supervisor.

Appendix B (Con't)

<p>Case Studies</p> <p>**To ensure adequate functioning of the case studies, make sure this PowerPoint presentation is in slide show mode, which is normally at the bottom of the screen, as shown below.**</p> 	<p>Scenario 1</p> <p>A newly admitted patient admitted with pneumonia calls the nurse to go to the bathroom. The nurse goes through the BMAT steps and the patient passes all the levels up to standing. However, when testing for marching, the patient grabs the nurse for support. The nurse obtains a verbal and the patient is able to pass Step 4, "March and Stop." What is the patient's mobility level? Select one of the boxes below.</p> <p>Mobility Level 1 Mobility Level 2 Mobility Level 3 Mobility Level 4 Mobility Level 5</p> 	<p>Correct!</p> <p>Mobility Level 4, because patient passed the Sit and Shake, Stretch and Point, Dynamic Stand, but could not pass Step 4 "March and Stop" without a walker. Therefore, the patient is labeled BMAT Level 4.</p>  <p>Click to continue →</p>
<p>Incorrect. Please try again.</p>  <p>Click HERE to go back</p>	<p>Scenario 2</p> <p>A patient with a stroke presents with right-sided weakness. The nurse needs to assist the patient's BMAT level, and asks the patient to sit up to the side of the bed. The patient needed moderate assistance when sitting the patient up and maximum assistance to maintain the patient's balance at the edge of the bed. What mobility level is he? Select one of the boxes below.</p> <p>Mobility Level 1 Mobility Level 2 Mobility Level 3 Mobility Level 4 Mobility Level 5</p> 	<p>Correct!</p> <p>Since the patient failed the sitting portion of Step 1 "Sit and Shake" test, the patient is labeled as Mobility Level 1 (Total Assist).</p>  <p>Click to continue →</p>
<p>Incorrect. Please try again.</p>  <p>Click HERE to go back</p>	<p>Scenario 4</p> <p>A patient has been in the progressive care unit for more than 4 weeks and is disoriented. The nurse assessed him using BMAT and sat the patient down on the side of the bed. He is able to balance himself and can shake both his hands. He was able to extend his leg for 5 seconds and point on both legs. However when he took to get up, he was unable to lift his buttocks off the bed. What level is this patient? Select one of the boxes below.</p> <p>Mobility Level 1 Mobility Level 2 Mobility Level 3 Mobility Level 4 Mobility Level 5</p> 	<p>Correct!</p> <p>This patient is BMAT Level 2: Maximum Assist. Although the patient is able to sit up, shake hands bilaterally, and stretch and point bilaterally, patient failed Step 3, the "Stand" test.</p>  <p>Click to continue →</p>
<p>Incorrect. Please try again.</p>  <p>Click HERE to go back</p>	<p>Scenario 5</p> <p>A patient with a status-post valve replacement passes all the BMAT steps, including Step 4 "March and Stop," and did not require an assistive device. After walking inside the room approximately 30 feet, patient complained of fatigue and had to sit down on a chair. What BMAT level should this patient be? Select one of the boxes below.</p> <p>Mobility Level 1 Mobility Level 2 Mobility Level 3 Mobility Level 4 Mobility Level 5</p> 	<p>Correct!</p> <p>Since the patient was able to perform the Sit and Shake, Stretch and Point, and Dynamic Stand, but is unable to walk 150 feet to be independent, therefore the patient is Mobility Level 4.</p>  <p>Click to continue →</p>
<p>Incorrect. Please try again.</p>  <p>Click HERE to go back</p>	<p>Scenario 6:</p> <p>A nurse assesses a patient that had a total knee replacement two days ago. The patient was able to sit herself up to the edge of the bed, extend her leg for more than five seconds, point her foot, and stand for five seconds. When asked to march in place, the patient was unable to. What mobility level is this patient? Select one of the boxes below.</p> <p>Mobility Level 1 Mobility Level 2 Mobility Level 3 Mobility Level 4 Mobility Level 5</p> 	<p>Correct!</p> <p>Since the patient passed the Stand, Shake and Stretch and Point, the nurse knows that the patient has now surpassed Mobility Level 3. The patient also passed the Stand test, surpassing Mobility Level 3, however patient failed Step 4, March and Stop, labeling the patient as Mobility Level 3.</p>  <p>Click to continue →</p>
<p>Incorrect. Please try again.</p>  <p>Click HERE to go back</p>	<p>Congratulations! You have now completed the El Camino Hospital's BMAT Educational Module!</p>	<p>References</p> <p>Fitzpatrick, M. A. (2014). Safe patient handling and mobility: a call to action. American Nurse Today, 9(Suppl 9), 1.</p>

Appendix C



BMAT-Picture Guide

Assessment Level One

Sit and Shake

Mobility Level 1

Unable to move to assessment level 2, consider use of total lift and other SPHM mobility equipment.




Assessment Level Two

Stretch and Point

Mobility Level 2

Unable to proceed to assessment level 3 consider sit to stand and other SPHM Mobility equipment.




Assessment Level Three

Stand

Mobility Level 3

Unable to proceed to assessment level 4 or needs assistive equipment. Standby or offer assistance with non-powered stand aid.




Assessment Level 4

Walk

Mobility Level 4

Patient is able to walk independently . Always implement safest method for ambulation remind patient "Call don't fall",




*Refer to the Banner Mobility Assessment Tool for Nurses (BMAT) for complete assessment details.

Appendix D

BMAT CONTRAINDICATIONS

- Bilateral extremity non-weight bearing
- Strict bed rest
- Unable to follow commands

^oBefore you begin this assessment determine the patient's baseline functional mobility level.

BMAT

BEDSIDE MOBILITY ASSESSMENT TOOL



STEP 1: SIT AND SHAKE

Assess if the patient can:

1. Sit themselves up from a semi-reclined position and maintain balance on the edge of the bed
2. Reach across midline, grab and shake clinician's hand. Assess bilaterally, one hand is sufficient to proceed.

YES, GO TO STEP 2
NO = LEVEL 1



STEP 2: STRETCH&POINT

Assess if the patient can:

1. From seated position, straighten one knee, and hold for 5 seconds.
2. Flex the ankle and point toes towards the ceiling. Assess legs that patient is intending to stand on. One leg is sufficient to proceed.

YES, GO TO STEP 3
NO = LEVEL 1



STEP 3: STAND



Assess if the patient can:

1. Stand up from chair or bedside without assistance and hold standing position for 5 seconds

^o**Note:** Use a walker if prescribed, used at home, or otherwise indicated

YES, GO TO STEP 4
NO = LEVEL 2



STEP 4: MARCH & STEP



Assess if the patient can:

1. March in place for 5 seconds
2. Take a step forward and return each foot to original position. Assess bilaterally.

^o**Note:** Use a walker if prescribed, used at home or otherwise indicated

YES, GO TO STEP 5
NO = LEVEL 3



STEP 5: WALK



Assess if the patient can:

1. Walk at least 150 feet (75 floor tiles) safely, without loss of balance, without assistance, and without assistive device.

^o**Note:** Use fall prevention chair

YES = INDEPENDENT
NO = LEVEL 4

Appendix E

BMAT

BEDSIDE MOBILITY ASSESSMENT TOOL EQUIPMENT GUIDE

LEVEL 1: TOTAL ASSIST

Ceiling Lift Portable Passive Lift Hovermatt

LEVEL 2: MAXIMUM ASSIST

Mechanical sit-to-stand Z-slider

LEVEL 3: MODERATE ASSIST



Non-mechanical sit-to-stand

LEVEL 4: MINIMAL ASSIST

Walker Crutches Belt Cane

LEVEL 5: INDEPENDENT

Appendix F



**BEDSIDE MOBILITY
ASSESSMENT TOOL**
**INSTRUCTIONAL
VIDEO**

▶ ⏪ 🔊 0:02 / 2:53 ⚙️ □ 🗉

BMAT Instructional Video



BMAT Scenario 1

▶ ⏪ 🔊 0:01 / 7:22 ⚙️ □ 🗉

BMAT Scenario Examples

Appendix G



BEDSIDE MOBILITY ASSESSMENT TOOL (BMAT)

Training for Super-Users



BMAT Learning Objectives

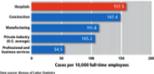
- By the end of this presentation, the learner will be able to:
 - Explain the purpose of using the Bedside Mobility Assessment Tool (BMAT)
 - Demonstrate how to conduct each step of the BMAT
 - Correctly assess patients' mobility level using the BMAT
 - Identify the correct equipment and/or assistive device to use for each BMAT level

Why BMAT

- Promoting a practice of 200% safety
 - Reduce nursing staff injuries
 - Reduce patient injuries and falls

Reducing Nursing Injuries

- Assessment provides crucial data to avoid high risk mobilizations
- Links nursing staff with appropriate equipment for specific patient conditions



Safe Patient Handling

- Reduced risk of falls
- Improved communication between staff
- Encourages increased ambulation

Review Question

1. What is the number one cause of caregiver injuries?

- Slips, trips, and falls
- Overexertion and bodily reaction
- Contact with objects
- Violence

Answer

1. What is the number one cause of caregiver injuries?

- Slips, trips, and falls
- Overexertion and bodily reaction**
- Contact with objects
- Violence



Review Question

2. What is the maximum manual lift weight for nurses?

- 50 lbs
- 45 lbs
- 35 lbs
- 75 lbs

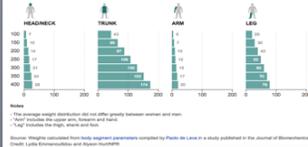
Answer

2. What is the maximum manual lift weight for nurses?

- 50 lbs
- 45 lbs
- 35 lbs (OSHA, 2014)**
- 75 lbs

Heavier Patients Mean Heavier Lifting

How much each body part might weigh for a man at different body weights (in pounds)



Review Question

3. An 85-year old, 185 lb total assist stroke patient needs to be moved up in bed, what would you do?

- Use the sheet to pull her up from the head of the bed
- Call someone else to help you move the patient up with a draw sheet
- Get a z-slider and use it to pull the patient up from the head of the bed
- Put the patient on a Hovermatt and have someone help you move her up

Answer

3. An 85-year old, 185 lb total assist stroke patient needs to be moved up in bed, what do you do?

- Use the sheet to pull her up from the head of the bed
- Call someone else to help you move the patient up with a draw sheet
- Get a z-slider and use it to pull the patient up from the head of the bed
- Put the patient on a Hovermatt and have someone help you move her up**

Review Question

4. How do you know if a patient can safely stand independently?

- The patient can go from a sitting to a standing position in one movement without using his/her hands as an assist
- The patient states he/she is independent at home and ambulates without any assistive devices
- The patient states he/she can stand independently once someone assists him/her to a standing position
- The patient has a physical therapy order to ambulate independently at least twice a day

Answer

4. How do you know if a patient can safely stand independently?

- The patient can go from a sitting to a standing position in one movement without using his/her hands as an assist**
- The patient states he/she is independent at home and ambulates without any assistive devices
- The patient states he/she can stand independently once someone assists him/her to a standing position
- The patient has a physical therapy order to ambulate independently at least twice a day

Review Question

5. A 65-year old, 170 lb patient with diabetes desperately needs to get up and use the bathroom. The patient states she ambulates independently at home and just needs help to stand, what do you do?

- Assess the patient's mobility prior to standing the patient
- Use the non-mechanical sit-to-stand to assist the patient to a standing position and transport her to the bathroom
- Assist the patient to a standing position and walk with her to the bathroom in case assistance is needed
- Have the patient use a walker to assist herself to a standing position and allow her to independently ambulate to the bathroom

Answer

5. A 65-year old, 170 lb patient with diabetes desperately needs to use the get up and use the bathroom. The patient states she ambulates independently at home and just needs help to stand, what do you do?

- Assess the patient's mobility prior to standing the patient**
- Use the non-mechanical sit-to-stand to assist the patient to a standing position and transport her to the bathroom
- Assist the patient to a standing position and walk with her to the bathroom in case assistance is needed
- Have the patient use a walker to assist herself to a standing position and allow her to independently ambulate to the bathroom

BMAT Contraindications

- Bilateral extremity non-weight bearing
- Strict bed rest
- Unable to follow commands



* Before you begin this assessment determine the patient's baseline functional mobility level.

Tips for Surgical Patients

If patient unable to come to sitting position independently (e.g. sternal precautions, large abdominal/hip wounds/restriction, etc.), you may make additional accommodations to safely assist the patient with the assessment of BMAT.



Setting the Patient to the Edge of Bed System 3: Therapeutic Support to Sit

- Use bed controls to assist moving the patient to the side rails or parallel bed
- For patients with sternal precautions, assist the patient to sit up to their elbows, push off with their elbows, and then lower their legs
- May offer one hand to patient for balance or guidance, but if patient is pulling or requiring more support, consider system 2.

Appendix G (Con't)

<p>Tips for Surgical Patients</p> <p>Getting the Patient to the Edge of Bed Ordering 2: 18 Assistance</p> <ul style="list-style-type: none"> • Assist sitting up on both back and side and sit, secure the sling to the sling bar and lift the patient to a bedside sitting position at the edge of bed to test here. • Once patient is positioned safely at the edge of the bed, lower the tension on the lift and if patient is able to maintain sitting, proceed with the assessment. 	<p>Scenario 1</p> <ul style="list-style-type: none"> • The pt is an elderly woman who is two days post-op from a left knee replacement surgery. 	<p>Scenario 1</p> <ul style="list-style-type: none"> • She passes the Sit-and-Shake, Stretch and Point, Stand, March and Step with minimal difficulty. She is able to walk 150 ft with a walker.
<p>Scenario 1 Rationale</p> <p>The patient was able to pass the Sit and Shake, Stretch and Point, Stand, March and Step which indicates the patient surpassed Step 4. The patient is a Mobility Level 4 (Minimal Dependent).</p>	<p>Scenario 2</p> <ul style="list-style-type: none"> • The patient is a multi-trauma patient who broke their right leg, but able to bear weight on left leg. 	<p>Scenario 2</p> <ul style="list-style-type: none"> • They are able to sit up to the edge of the bed without assistance, shake hands, stretch and point left foot for at least 5 seconds, and stand on your left leg for at least five seconds. • With the assistance of a walker, they can hop in place and hop forward, but unable to hop backwards.
<p>Scenario 2 Rationale</p> <p>The patient passed the Sit and Shake, Stretch and Point, Stand, March with a walker, hop forward, but unable to hop backwards. The patient is Mobility Level 3 (Moderate Assist).</p>	<p>Scenario 3</p> <ul style="list-style-type: none"> • The patient, on 4A, has been in bed for more than 1 week and is deconditioned. 	<p>Scenario 3</p> <ul style="list-style-type: none"> • They are able to sit down on the side of the bed. They maintain their balance, pass the sit and shake bilaterally, and pass the stretch and point bilaterally. • When attempting to stand, they were not able to lift their buttocks off the bed.
<p>Scenario 3 Rationale</p> <p>Patient failed Step 3, "Stand" test, which labels the patient as Mobility Level 2 (Maximum Assist).</p>	<p>Scenario 4</p> <ul style="list-style-type: none"> • The patient has had a total right hip replacement. 	<p>Scenario 4</p> <ul style="list-style-type: none"> • They are able to sit up on the side of the bed with assistance. • When you go to shake their right hand, they start falling to the side. • They are able to sit up again on their own. When you continue to shake their right hand, they are unable to keep their balance again.
<p>Scenario 4 Rationale</p> <p>The patient was unable to pass the Sit and Shake step. The patient has Mobility Level 1 (Total Assist).</p>	<p>ECH BMAT Rollout</p> <p>Patient room signs</p> <ul style="list-style-type: none"> • Inside and outside • Identifies patient mobility level <ul style="list-style-type: none"> - RNs, CNAs, PTs • Serves as a reminder to staff to assess mobility each shift and to use appropriate equipment • Informs patients of required level of assistance • Saves time 	<p>ECH BMAT Rollout</p> <p>Reference Badge</p> <ul style="list-style-type: none"> • Quick reference guide • Easily accessible <p>Reference Binder</p> <ul style="list-style-type: none"> • Detailed BMAT reference guide • Case studies • Frequently Asked Questions (FAQ) • Emphasis on key teaching points 
<p>BMAT Post Test</p> <ul style="list-style-type: none"> • Pilot Evaluation: Nov 5 - Nov 15th • Post-implementation data to evaluate effectiveness of BMAT pilot and resources 	<p>Congratulations! You have now completed El Camino Hospital's BMAT Super-User Training!</p>	

Appendix H

Standardizing “Just in Time” Training for RNs

- Ask about baseline mobility prior to hospitalization
- Pt only has to pass on 1 side of their body in order to move on to the next step
- Adaptable assessment → if you see pt walking, you don't have to start assessment from the beginning
- Use walker if pt is non weight bearing on 1 side, able to hop to complete assessment
- Demonstration on at least 1 pt
- CNAs: can “gather information” using BMAT and report to RN, RN will have to document. Similar to CNA performing vitals.
- Where to chart BMAT score
- Night shift: emphasize they can use equipment if they don't have someone to help them move the pt

Appendix I (Con't)

Following Super-User training, I believe BMAT will improve patient safety. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

The psychomotor scenarios helped me learn how to assess and score patients with BMAT. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

Following Super-User training, I am comfortable helping staff learn and improve their use of BMAT. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

Additional comments:

Your answer

Your answer

Thank you for your feedback and support!

SUBMIT

Appendix J

BMAT Pre/Post Test

Position (RN, PCA, Charge Nurse): _____ Unit: _____ Years on Unit: _____

1. What is the recommended maximum amount of weight a healthcare worker should lift without lift equipment?
 - a. 15 lbs
 - b. 35 lbs
 - c. 45 lbs
 - d. 50 lbs

2. What does BMAT stand for?
 - a. Bedside Mobility Assistance Tool
 - b. Bedside Mobility Assessment Tool
 - c. Bariatric Mobility Assessment Tool
 - d. Bariatric Mobility Assistance Tool

3. What is the correct order of the BMAT?
 - a. Sit and Shake, Stretch and Point, Stand and Walk
 - b. Sit and Stretch and Point, Stand and March, Walk
 - c. Sit and Shake, Stand and Stretch, March and Walk
 - d. Sit and Shake, Stretch and Point, Stand, March and Step, Walk

4. Prior to using the BMAT to assess a patient what should the nurse do?
 - a. Assess the patient to see if he/she can follow verbal commands
 - b. Determine if ambulation is contraindicated
 - c. Check MD orders to see if bed rest is prescribed
 - d. Question the patient to determine his/her mobility baseline prior to hospitalization
 - e. All of the Above

5. Match the BMAT level to the appropriate equipment and/or assistive device(s).

Level 1: Total Assist ____	a. Z-slider	f. Cane
Level 2: Maximal Assist ____	b. Walker	g. Crutches
Level 3: Moderate Assist ____	c. Ceiling lift	h. Hovermatt
Level 4: Minimal Assist ____	d. Portable Passive Lift	i. Non-Mechanical Sit to Stand
Level 5: Independent Assist ____	e. Mechanical Sit to Stand	j. none of the above

6. How often should a nurse use the BMAT to assess patient mobility? (select all that apply)
 - a. During the initial admission assessment
 - b. Every Day
 - c. Every shift
 - d. Before discharge

-
- e. When there is a change in patient status (i.e. after a procedure, medication changes, or tiring therapy session)
 - f. All of the above
 - g. A,C, and E

Appendix J (Con't)

7. If a patient requires the use of a walker, can he/she be assessed with the BMAT?

- a. Yes b. No

8. Your patient is able to stand without assistance, however when attempting to March and Step, the patient starts to lose balance. What is the nurse's next step?

- a. Assist the patient back to bed and identify the patient as Level 2
- b. Asks the nursing assistant to bring the Sara Steady to the room
- c. Have patient reattempt the March and Step with the use of a walker
- d. Have the patient stand in place for a moment and once balance is regained, continue the assessment

9. While performing the Stretch and Point, a patient is only able to successfully perform the task with the left lower extremity. What is the nurse's next step?

- a. Continue with next step of the BMAT
- b. Stop and assist the patient back to a lying down position
- c. Identify the patient as a Level 1: Total Assist
- d. Identify the patient as a Level 2: Maximal Assist

10. A patient successfully performs the Sit and Shake, and Stretch and Point, but is unable to stand. What is the nurse's next step?

- a. Pause the assessment and perform the BMAT one hour later
- b. Assist the patient back to bed and identify that patient as Level 2: Maximal Assist
- c. Assist the patient to a standing position and continue the BMAT assessment
- d. None of the above

Appendix K

Self-Assessment Survey

On a scale of 1-5 (5 being the best, most/very, or always):

1. How comfortable are you assessing a patient's mobility level?

1 2 3 4 5

2. How confident do you feel mobilizing a patient for the first time post-surgery?

1 2 3 4 5



3. How do you assess patient mobility? **Rank your most commonly used methods**

- I use the falls risk assessment
- I don't use a mobility assessment tool
- I use information received during shift change
- I obtain mobility information from the patient
- Other: _____

4. How do you decide which assistive devices you will use when mobilizing or transferring a patient? _____

Appendix K (Con't)

On a scale of 1-5 (5 being the best, most/very, or always)

	Have you been adequately trained on the following equipment? (Yes/No)	When indicated for a patient, how likely are you to use the equipment? (1-5 scale)	Rate your confidence level using the equipment. (1-5 scale)
Ceiling Lift			
Portable Passive Lift			
SARA Steady (non-mechanical sit-to-stand)			
SARA Plus (mechanical sit-to-stand)			
Gait Belt			
Falls Prevention Chair			

Appendix L

You are

BMAT Level 1: Total Assist

Last Assessed (Date/Time/Initial):

Ceiling Lift Repositioning Sling Portable Passive Lift Hovermatt



The image displays four circular icons representing different types of patient lifts. From left to right: 1. Ceiling Lift: A person is being lifted by a device attached to a ceiling. 2. Repositioning Sling: A person is lying on a bed, supported by a white sling. 3. Portable Passive Lift: A person is being lifted by a device on wheels. 4. Hovermatt: A person is lying on a mat that is being lifted by a device on wheels.

Appendix M



Appendix N

BMAT Level 1

BMAT Level 2

BMAT Level 3

BMAT Level 4

Appendix O

El Camino Hospital THE HOSPITAL OF SILICON VALLEY	
BMAT LEVEL	EQUIPMENT
Level 1	Ceiling or portable passive lift, maxmove, golvo, hovermat, repositioning sheets
Level 2	Mechanical sit-to-stand device, SARA plus, Z-slider
Level 3	Non-mechanical sit-to-stand, SARA steady
Level 4	Walker, cane, crutches, gait belt
Level 5	N/A

El Camino Hospital THE HOSPITAL OF SILICON VALLEY	
BEDSIDE MOBILITY ASSESSMENT TOOL (BMAT)	
STEP 1: SIT & SHAKE	Sits @ edge bed or chair maintain balance; shake hands to grab across midline
STEP 2: STRETCH & POINT	Straighten knee & hold 5 sec flex ankle/toes & hold 5 sec
STEP 3: STAND	Stand from sitting for 5 sec; use assistive device prn
STEP 4: MARCH & STEP	March in place 5 sec; step forward & back; use assistive device prn
STEP 5: WALK	Walk min 150 safely; no loss of balance, no assistive device