

BMS User Manual

1. What is the BMS?

BMS is an acronym for Basic Movement Scale, which is a scale used for measuring basic movements in daily life. These basic movements are not directed toward specific goals; rather they are movements that allow individuals to perform the actions and activities of daily living (ADL). BMS Version 1 comprises nine evaluation items including turning over in bed and transfer movements.

The BMS assessment criteria are rated from 1 to 5 based on whether performing the movement is possible with or without using the upper limbs. One of the characteristics of the scale is its use of illustrations to depict the movements, which enables the person using it and third parties to easily gain an understanding of a patient's movement ability. While referring to "How to Use the BMS", please utilize the BMS when performing rehabilitation and for information sharing.

2. BMS measurement standards

The BMS is used to assess a patient's capacity to turn over in bed, sit up on the edge of the bed, maintain a sitting position, stand up, maintain a standing position, sit down, perform transfer movements, take a step and walk.

"Capacity" indicates whether a patient in a rehabilitation room or other fixed environment can or cannot consciously perform a relevant movement. However, distinctions must be made since there would be individual differences in movement ability when performance is measured in everyday life due to the living environment, aids used and other factors.

Furthermore, the three items – turning over in bed, sitting up on the edge of the bed and taking a step – can be performed in two directions (towards the left or right). For consistency among users of the BMS and third parties, the BMS is to be defined to measure movement in the direction used most frequently in daily life (the dominant side) as "Practical" and the opposed (non-dominant side) as "Unpractical".

3. BMS assessment criteria

The BMS assessment criteria are scored from 1 to 5, with scores nearer 5 indicating higher capability and scores nearer 1 a lower capability.

score	classification
5	Possible without using the upper limbs
4	Possible without using the upper limbs, but not every
3	Possible when using the upper limbs
2	Possible when using upper limbs, but not every time
1	Not possible

4. Advantages of using the BMS

The advantages of using the BMS include the following:

- ◆ Changes in a patient's ability over time can be easily understood
- ◆ Physical therapist (PT) treatment goals become clear
- ◆ PT treatment outcomes become clear
- ◆ Information can be shared easily between doctors, nurses and other members of staff
- ◆ Can be used during explanations to patients and family members

5. Interpretation of "upper limbs used" and "possible every time"

1) "Upper limbs used"

This means that a movement is performed with the patient clearly holding onto a handrail, bed or other item, pressing down on the bed with the hands or using some other means of assistance. This does not, however, include natural movements of the upper and lower limbs while performing a movement. For example, when sitting up on the left side of the bed, resting the left hand and left elbow on the bed when raising the head and upper body above the surface of the bed is considered a natural movement.



(Part way through sitting up)

"Natural movement"



"Upper limbs used"

2) "Possible every time"

This means that a movement can be performed without fail, every time. A point to note here is that when a patient performs a movement, it does not have to be in exactly the same manner every time. Even if there is no change in a patient's level of movement, depending on the way the body is moved, the speed and direction of movement changes, and the way a patient moves also changes depending on his or her physical condition. Furthermore, ability may change depending on how a movement is performed. Consequently, even for specialists, it can be extremely difficult to determine whether a movement is "possible every time".

6. Using the BMS (specific examples)

1) Using it for daily records

"Today's BMS score for ability to stand is 5 (possible without using upper limbs). The score yesterday was 4 (possible without using upper limbs, but not every time). The score the day before yesterday was..."

"Recently, there has been an increase in score to 5."

Since the BMS quantifies movement ability, using daily records makes it possible to follow changes in performance (improvement, deterioration).

From the viewpoint of PT, the BMS is a useful tool for verifying the treatment outcome of PT and reconsidering the treatment regimen.

2) Use for information sharing

"The goal is a score of 3 for standing up (when using upper limbs)."

From the viewpoint of PT, the specific goal of treatment, including instructions from the doctor, becomes clear. Nurses and care managers can easily understand what PT they are performing and what they should be performing.

The BMS illustrations also allow patients and family members to visualize the current state of treatment and the future treatment strategy when being given explanations, and make it easier for them to understand the details of treatment.

3) Use to review PT

"There is no change in the FIM score, but the BMS score has improved from 2 (using the upper limbs, but not every time), to 3 (using the upper limbs)."

" There is no change in the FIM score, but the BMS score varies between 2 and 3."

FIM is an indicator of daily performance. Even if a change in performance is not reflected in daily life during the course of PT treatment (no change in FIM), a change in the performance of basic movements (change in BMS) is possible.

For doctors, clarification of PT treatment outcomes enables review of treatment and reconsideration of treatment plans.

