

***JHH***  
***Function***  
***Acute Care Score***  
***(JHH-FACS)***  
***GUIDE BOOKLET***

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## ***JHH Acute Care Function Score INSTRUCTIONS***

### **Introduction**

The Johns Hopkins Hospital Function Acute Care Score is designed to measure basic functional

outcomes in the acute care setting while demanding little time from the tester. This functional measure is an adaptation of the FIM (Functional Independence Measure), developed by the UDS (Uniform Data Service) for rehabilitation patient populations. [1,2] The Johns Hopkins Hospital Physical Medicine and Rehabilitation physical therapy research committee has adapted the FIM to allow its use in the acute care setting for measuring basic functional changes in a relatively short number of treatments. The FIM is utilized in rehabilitation settings, and has 18 sections covering self care, bladder/bowel management, communication, social cognition, and functional mobility.[1] As the literature search was conducted for an appropriate acute care functional outcomes tool, the FIM became attractive for several reasons. It is one of the most widely used tools in measuring rehabilitation outcomes, it has sections which are directly pertinent to occupational therapy and physical therapy, it has been shown in multiple studies to have high reliability and validity [3,4,5,6] and it is clinically practical. Had there been a functional outcome scale already designed for an acute care population such as ours, we would have tested it, but none existed.[7]

The PT research committee performed a trial of the three PT oriented functional mobility scores as written in the FIM (Transfers, Locomotion, and Elevations), and found it not sensitive enough to patient changes in the acute care setting. For example, there were concerns that if a patient could not walk at least 150 feet, then the highest score would be merely a 2 out of 7 (7 being complete unassisted independence), and if a patient progressed from a walker to a cane, it would not be indicated by the score. So we adapted these three activities to include scoring of changes in assistive device; furthermore, with locomotion and elevations (stairs) alone, adaptations include scoring of distance as well. This new scale is significantly different from the FIM and is called the Johns Hopkins Hospital Function Acute Care Score (JHH-FACS). The second trial with the new adaptations in place seems to indicate a much more sensitive tool which is more appropriate for the acute care patient population seen at JHH.

In contemporary rehabilitation medicine, it is necessary to measure and record trends in outcomes in which our interventions play a role. The data from these types of studies are useful for clinical evaluation and prediction of outcomes, for example the number of necessary treatments per diagnosis and expected functional ability at discharge. The FACS by all means is not intended to measure every aspect of PT practice, but rather to measure basic functional changes across multiple diagnoses in the acute care setting. It is designed to be applicable to any inpatient where basic function is an issue. The activities scored are simply Transfers from bed to chair, Locomotion, and Stairs. Within each activity, level of assistance needed and assistive device used are identified, and for locomotion and stairs, distance is identified as well. At the time of this writing there are no JHH inpatient populations where this measure is not appropriate. In the future it may come to light that there are more appropriate outcome measures for certain patient populations such as those with largely psychologic related diagnoses (i.e. Geriatrics group, Chronic pain group). This tool is not designed to be used for patients treated in the JHH outpatient clinic (unless later statistics show a significant population or group to measure such as CVA, MS, TBI). This is because it is not applicable to patients where outcomes other than basic function are the issue. For example, an otherwise healthy orthopedic

outpatient being treated only for elbow range of motion deficit usually does not have issues related to transfers, ambulation and stairs.

This measure is intended to be clinically practical, and thus consume a minimal amount of therapist time. Any health care provider who has been trained and has passed the FACS competency (written and demonstration) can use this tool. The FACS can be used at any time during a patient's acute care inpatient admission, but it will be required to be recorded upon Physical Therapy Initial Evaluation and Discharge beginning April 15, 1996. (Although practice scores should be begun outside of the medical record after the department inservice March 5, 1996.)

### **Usage Guidelines**

The activities scored are: **Transfers, Locomotion, and Stairs**. It is important to read and commit to memory the descriptions of each activity scored so that the patient's scores reflect only that which is in the description. In the course of learning, the Activity Guide Sheets are designed to aid in scoring (page 5).

The activity being scored must actually be directly witnessed on the specified day by a health care provider who is trained in the JHH FACS. If a patient's score seems to be between two levels, he/she is given the lower score. This is applicable to all activities (transfers, locomotion, and stairs), and all measures (assistance, assistive device, and distance).

Each activity scored takes into consideration a weighed measure of the amount of assistance required by the patient and the percentage of patient effort put forth into the activity (this will be abbreviated as Assistance@). Each activity score also identifies the assistive device used. Also taken into account is the distance the patient travels in Locomotion and Stairs.

The first part is the level of assistance. The assistance level can be scored between 0 and 7. When scoring a level of assistance, weigh the level of effort the patient makes in balance with the amount of assistance required by the patient. The score can not be purely the physical therapist's effort, or of the number of people assisting with the activity, since these vary depending upon the people giving assistance for any given patient. As outlined on the Activity Guide Sheets, the level of patient effort is balanced with the assistance required in the following way:

- Aperforms less than 25%@ - ATotal assistance@
- Aperforms 25-49%@ - AMaximal assistance@
- Aperforms 50-74%@ - AModerate assistance@
- Aperforms 75% or more@ - AMinimal contact assistance@

(Other categories include supervision and independence - see Activity Guide Sheets)

Selecting the appropriate level requires the same type of decision making that therapists often make in distinguishing Asupervision@ from Acontact guard,@ or Aminimal assistance@ from AModerate assistance.@ If a patient seems to fall between two levels, the score given is the lower of the two (as in

all the scoring). In the original FIM score, this method of grading has been shown to be reliable with trained testers, and we expect it to be so in the FACS as well.

The second part of each activity scored is the assistive device. The assistive device level takes into account usage of a cane, crutches, etc. The cane category includes straight or quad canes. The walker category includes standard walkers, rolling walkers and hemiwalkers. In certain situations in acute care an IV pole is utilized as a type of assistive device, this should be scored in the walker category. (\*\* As on the Activity Guide Sheets, AD@ = Anone/other,@ meaning none of the listed assistive devices: walker, crutches, cane. However, AD@ may be used in the special circumstance when special adaptive equipment is used such as sliding board for transfer, special seating for Wc, prosthesis or orthosis. If this is the case, please note in the margin the adaptive device(s) being used.)

The third and last part in the score is for the distance traveled (for locomotion and stairs). An example of how to score an activity would be, looking at the Activity Guide Sheets for assistance (page 5): if a patient walked with supervision with crutches a distance of 60 feet her score would be **L 5/B/C** (Amb). When first using the FACS, it may be helpful to utilize the FACS Training Score Sheet (page 9), where the level of assistance is circled, then the assistive device and distance are written in their respective columns (please write next to the score AIE@ or ADC@).

When seeing a patient, the progression for scoring which is easiest to follow is:

- 1.) Choose an activity (Transfers, Locomotion, or Stairs).
- 2.) Identify the assistance level (weighed with the percent of patient effort).
- 3.) Determine the assistive device.
- 4.) Observe (for locomotion and stairs) the distance traveled.
- 5.) Choose the next activity, and begin the score again

If an activity can not be measured because of safety reasons or the patient requires total assistance, it is scored a 1/0/0. If a patient can not be scored because his/her evaluation was interrupted (i.e. taken to radiology, etc) the score is a 0/0/0 for each activity not observed (i.e. locomotion: 0/0/0). It is important to obtain the complete score with all three activities whenever possible.

Some final usage guidelines, when scoring the Locomotion activity, the mode must be identified. Wheelchair or Ambulation must be identified as the primary means of locomotion. If both are utilized equally, then identify both in the locomotion category (on the top of the column of the score sheet).

It is also important to allow the patient to give his/her best effort with all activities. This means for example that if able, the patient should be allowed to walk at least 150 feet since this would be equal to the highest score for ambulation distance. If this is not allowed, then the patients= given level of function will not accurately reflect their ability.

### **Therapist Expectations**

All three activities are to be assessed and scored in the JHH FACS upon initial evaluation and discharge. One score sheet per patient should be used for both evaluation and discharge information. This score sheet also includes some very basic information such as total number of treatments and referring service (true service, not billing code service, see page 10). The initial evaluation information should be completed at the time of IE and the score sheet should be stapled to the PT copy of the IE. Then upon discharge, the FACS form is to be completed with the DC score and filed with the normal PT records. This information is not designed to be filed anywhere except in the PT files in Osler one. If for some unusual reason a therapist does not have a score form, the following format should be followed (Where **T** is for transfers, **L** is for locomotion, and **S** for stairs. Please note that the Transfers score has only two parts because distance is moot, and is therefore not measured.):

T ( / )  
L ( / / ): ( ) Amb. ( ) Wc.  
S ( / / )

## *Activity Guide Sheets*

**ACTIVITY GUIDE SHEET**

**TRANSFERS: BED, CHAIR, WHEELCHAIR:** includes all aspects of transferring to or from supine in bed and coming to a standing position if walking is the typical mode of locomotion - to chair (or to w/c if is primary mode of locomotion).

**NO HELPER**

7/0 Complete Independence--If walking, approaches, sits down and gets up to a standing position from a regular chair; transfers to or from bed (supine)to chair. Performs safely.

If in a wheelchair, approaches a bed or chair, locks brakes, lifts foot rests, removes arm rest if necessary, and performs either a standing pivot or sliding transfer (without board) to supine or returns. Performs safely.

6/- Modified Independence--Requires adaptive device such as a prostheses or orthosis, uses assistive device, special seat or chair; or sliding board or **takes more than reasonable time or there are safety considerations.**

- 6/A Walker
- 6/B Crutches
- 6/C Cane
- 6/D None/Other\*\*

**HELPER**

5/- Supervision or Setup--Requires supervision (e.g.,standby, cuing for safety, or coaxing) or setup (positioning sliding board, moving foot rests, etc.)

- 5/A Walker
- 5/B Crutches
- 5/C Cane
- 5/D None/Other\*\*

4/- Minimal Contact Assistance--Subject performs 75% or more of transferring tasks.

- 4/A Walker
- 4/B Crutches
- 4/C Cane
- 4/D None/Other\*\*

3/- Moderate Assistance--Subject performs 50% to 74% of transferring tasks.

- 3/A Walker
- 3/B Crutches
- 3/C Cane
- 3/D None/Other\*\*

2/- Maximal Assistance--Subject performs 25% to 49% of transferring tasks.

- 2/A Walker
- 2/B Crutches
- 2/C Cane
- 2/D None/Other\*\*

1/0 Total Assistance--Subject performs less than 25% of transferring tasks. Or patient is unable or unsafe to perform transfer.

0/0 The tester unable to observe activity at this time because of unforeseen interruptions, etc. Please note in margin why unable to observe a transfer.

\*\* see page 3, paragraph 1

**ACTIVITY GUIDE SHEET**

**LOCOMOTION:** Check most frequent mode of locomotion. If both are about equal, check Amb and Wc.

( ) Amb=ambulation, ( )Wc=Wheelchair. (Note: to achieve level 6 with Wc, must perform additional maneuvering tasks as listed.)

**NO HELPER**

7/0/0 Complete Independence--Walks a minimum of 150 feet without assistive devices. Does not use any type of wheelchair or assistive device. Performs safely.

6/-/- Modified Independence--Walks using a prosthesis on leg or orthosis, using assistive device, or **takes more than reasonable time or there are safety considerations.**

If not walking, operates manual or electric wheelchair independently; turns around; maneuvers the chair to a table, bed, toilet; negotiates at least 3% grade; maneuvers on rugs and over door ~~s~~

6/A/-	Walker	6/-/A	Between 5 to 24 feet
6/B/-	Crutches	6/-/B	Between 25 to 49 feet
6/C/-	Cane	6/-/C	Between 50 to 149 feet
6/D/-	None/Other**	6/-/D	At least 150 feet

**HELPER**

5/-/- Supervision-- If walking or wheelchair requires standby supervision, cuing for safety, or coaxing. Wc unable to negotiate as on level 6.

5/A/-	Walker	5/-/A	Between 5 to 24 feet
5/B/-	Crutches	5/-/B	Between 25 to 49 feet
5/C/-	Cane	5/-/C	Between 50 to 149 feet
5/D/-	None/Other**	5/-/D	At least 150 feet

4/-/- Minimal Contact Assistance-- If walking or wheelchair, subject performs 75% or more of locomotion effort.

4/A/-	Walker	4/-/A	Between 5 to 24 feet
4/B/-	Crutches	4/-/B	Between 25 to 49 feet
4/C/-	Cane	4/-/C	Between 50 to 149 feet
4/D/-	None/Other**	4/-/D	At least 150 feet

3/-/- Moderate Assistance--If walking or wheelchair, subject performs 50% to 74% of locomotion effort.

3/A/-	Walker	3/-/A	Between 5 to 24 feet
3/B/-	Crutches	3/-/B	Between 25 to 49 feet
3/C/-	Cane	3/-/C	Between 50 to 149 feet
3/D/-	None/Other**	3/-/D	At least 150 feet

2/-/- Maximal Assistance--If walking or wheelchair, subject performs 25% to 49% of locomotion effort.

2/A/-	Walker	2/-/A	Between 5 to 24 feet
2/B/-	Crutches	2/-/B	Between 25 to 49 feet
2/C/-	Cane	2/-/C	Between 50 to 149 feet
2/D/-	None/Other**	2/-/D	At least 150 feet

1/0/0 Total Assistance--If walking or wheelchair, subject performs less than 25% of effort. Or patient is unable or unsafe to perform locomotion.

0/0/0 The tester unable to observe activity at this time because of unforeseen interruptions, etc. Please note in the

margin the reason why unable to observe locomotion.

\*\*see page 3, paragraph 1

**ACTIVITY GUIDE SHEET**

**STAIRS:** Goes up and down one flight (12 to 14 stairs) or half of a flight (6 to 7) indoors.

**NO HELPER**

- 7/0/0 Complete Independence--Goes up and down at least one flight of stairs without any type of handrail or support. Performs safely.
- 6/-/- Modified Independence--Goes up and down stairs requiring prosthesis or orthosis, using assistive device, or **takes more than reasonable time or there are safety considerations.**
- 6/A/- Crutches 6/-/A 6-7 stairs
- 6/B/- Handrail 6/-/D 12-14 + stairs
- 6/C/- Cane
- 6/D/- None/Other\*\*

**HELPER**

- 5/-/- Supervision--Requires standby supervision, cuing for safety, or coaxing to go up and down stairs.
- 5/A/- Crutches 5/-/A 6-7 stairs
- 5/B/- Handrail 5/-/D 12-14+ stairs
- 5/C/- Cane
- 5/D/- None/Other\*\*
- 4/-/- Minimal Contact Assistance--Subject performs 75% or more of effort to go up and down one stairs.
- 4/A/- Crutches 4/-/A 6-7 stairs
- 4/B/- Handrail 4/-/D 12-14+ stairs
- 4/C/- Cane
- 4/D/- None/Other\*\*
- 3/-/- Moderate Assistance--Performs 50% to 74% of the effort to go up and down stairs.
- 3/A/- Crutches 3/-/A 6-7 stairs
- 3/B/- Handrail 3/-/D 12-14+ stairs
- 3/C/- Cane
- 3/D/- None/Other\*\*
- 2/-/- Maximal Assistance--Performs 25% to 49% of stair climbing effort to go up and down stairs.
- 2/A/- Crutches 2/-/A 6-7 stairs
- 2/B/- Handrail 2/-/D 12-14 + stairs
- 2/C/- Cane
- 2/D/- None/Other\*\*
- 1/0/0 Total Assistance--Performs less than 25% of the effort. Or patient is unable or unsafe to perform elevations.
- 0/0/0 The tester unable to observe activity at this time because of unforeseen interruptions, etc. Please note in the margin the reason why unable to observe elevations.

\*\* see page 3, paragraph 1

**JHH FACS TRAINING**  
**SCORE SHEET**

(\*copy as needed)

Tester: \_\_\_\_\_ Service: \_\_\_\_\_ Pt. Name: \_\_\_\_\_ Hx.#/Pat. Com.#: \_\_\_\_\_

Pt. Dx.: \_\_\_\_\_ Eval. Date: \_\_\_\_\_ D/C Date: \_\_\_\_\_ Total# Rx.s: \_\_\_\_\_ D/C=d to: \_\_\_\_\_

Transfers Assistance	Assistive Device	Locomotion Assistance ----- --Amb=( ) Wc=( )	Assistive Device	Distance	Stairs Assistance	Assistive Device	Distance
<b>7</b>		<b>7</b>			<b>7</b>		
<b>6</b>		<b>6</b>			<b>6</b>		
<b>5</b>		<b>5</b>			<b>5</b>		
<b>4</b>		<b>4</b>			<b>4</b>		
<b>3</b>		<b>3</b>			<b>3</b>		
<b>2</b>		<b>2</b>			<b>2</b>		
<b>1</b>		<b>1</b>			<b>1</b>		
<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
circle one above	A = walker B = crutches C = cane D = none/other	circle one above	A = walker B = crutches C = cane D = none/other	A = 5 - 24' B = 25 - 49' C = 50 - 149' D = 150'+	circle one above	A = crutches B = handrail C = cane D = none/other	A = 6-7 stairs D = 12 -14 stairs +

Please circle assistance level for each activity, then enter assistive device and distance codes in appropriate columns. Please also check (Amb)ulation and/or (W)heel(c)hair under locomotion. This training sheet is designed to put both IE and DC scores on the same sheet; therefore, please write next to your scores AIE@ or ADC.@ Refer to Instruction Sheet and Activity Guide sheets for further information. Copy this training sheet as needed.

*Example FACS Official Score sheet*

FACS Score Sheet  
For PM and R Use only

FACS I.E. R Use Only							PM&
Trans		Locom			Stair		
			Amb We				
Assist	A Dev	Assist	A Dev	Dist	Assist	A Dev	Dist
7		7			7		
6		6			6		
5	A	5	A	A	5	A	A
4	B	4	B	B	4	B	D
3	C	3	C	C	3	C	
2	D	2	D	D	2	D	
1		1			1		
0*		0*			0*		

*Instr: Circle appropriate item in each column.  
\* Please indicate below nature of interrupted score.*

\*

\_\_\_\_\_

\_\_\_\_\_

Patient name: \_\_\_\_\_  
 Therapist scoring I.E.: \_\_\_\_\_  
 Date of I.E.: \_\_\_\_\_  
 Therapist scoring D.C.: \_\_\_\_\_  
 Date of D.C.: \_\_\_\_\_  
 Total #Rx's at D.C.: \_\_\_\_\_

FACS D.C. PM& R Use Only							
Trans		Locom			Stair		
			Amb We				
Assist	A Dev	Assist	A Dev	Dist	Assist	A Dev	Dist
7		7			7		
6		6			6		
5	A	5	A	A	5	A	A
4	B	4	B	B	4	B	D
3	C	3	C	C	3	C	
2	D	2	D	D	2	D	
1		1			1		
0*		0*			0*		

*Instr: Circle appropriate item in each column.  
\* Please indicate below nature of interrupted score.*

\*

\_\_\_\_\_

\_\_\_\_\_

Patcom #: \_\_\_\_\_  
 HX #: \_\_\_\_\_  
 Date of I.E.: \_\_\_\_\_  
 DC'd to (please circle one)  
 Home Home PT Rehab NH  
 Sub Acute Rehab OP Hospice

## *References*

1. Hamilton, B., Granger, C., et al.: A uniform national data system for medical rehabilitation. In Fugrer, M., ed. *Rehabilitation outcomes: analysis and measurement*. Baltimore: Brookes, 1987:115-150.
2. Granger, C., Ottenbacher, K., Fiedler, R.: The Uniform Data System For Medical Rehabilitation, Report of First Admissions for 1993. *American Journal of Physical Medicine and Rehabilitation*, **74**: 63-66, 1995.
3. Dodds, T., Martin, D., Stolov, W., et al.: A Validation of the Functional Independence Measurement and its Performance Among Rehabilitation Inpatients. *Archives of Physical Medicine and Rehabilitation*, **74**: 531-536, 1993.
4. Bunch, W., Dvornch, V.: The AValue@ of Functional Independence Measure Scores. *American Journal of Physical Medicine and Rehabilitation Medicine*, **73**: 40-43, 1994.
5. Disler, P., Roy, C., Smith, B.: Predicting Hours of Care Needed. *Archives of Physical Medicine and Rehabilitation*, **74**: 139-143, 1993.
6. Grisby, J., Kookan, R., Hershberger, J.: Simulated Neural Networks to Predict Outcomes, Costs, and Length of Stay Among Orthopedic Rehabilitation Patients. *Archives of Physical Medicine and Rehabilitation*, **75**: 1077-1080, 1994.
7. Basmajian, J., ed.: *Physical Rehabilitation Outcome Measures*. Canada: Canadian Physiotherapy Association, 1994.

