# MOUNTAIN STATES REGIONAL HEMOPHILIA CENTER COLORADO ADULT JOINT ASSESSMENT SCALE

Evalu	ia 11 items					
~	4 requiere	n medición.				
	- A	trofia muscula	ar, deformidad	l axial, ROM y	/ Fuerza	
~	4 requiere	n observación	n/palpación			
	🖌 Б	dema, Crepita	ción, Inestabi	lidad, y march	a.	
<ul> <li>✓</li> </ul>	2 requiere	n interrogato	rio/observació	in		
	D	olor, uso de o	rtesis y/o féru	las		
~	1 barada	n la modición	del BOM			
	~					
			lorado Adul	-	5	
Patient ID		Joint Asse	essment Wo	rksheet	Date of Evaluation	
		Indicat	e any areas of joint or i	nuscle bleeding within	the last 2 weeks:	
leight: cm	Waist / Hip Ratio:		14 A 19 -	and the second s		SHI SHI
	_	Let		אין איז		
Veight kgs		Left Righ				
O	Left Ankle	Right Ankle	Left Elbow	Right Elbow	Left Knee	Right Knee
Swelling	LeitAlikie	Agint A like	Leit Libow	Tagit Libow	Leichnee	Right Rie
Comments:						
Puffy, Boggy, Tense (P, B, T)						
<b>Landmarks:</b> ∀isible (∀); Not Visible (N∀)						
Palpable (P); Not Palpable (NP)	P NP	P NP	P NP	P NP	P NP	P NP
Duration of Swelling Scores:	>= 6 months	>= 6 months	>= 6 m onths	□ >= 6 months	□ >= 6 months	>= 6 months
Swelling Scoring						
0 = None. 1 = Mild – slightly puffy; slight pal; 2 = Moderate – looks swollen; fee			nalnahle only			
3 = Severe – looks very swollen ; i						
Muscle Atrophy	An	kle	EII	ow	ĸ	nee
Tobe measured in a	cm from p	oplite al fossa;	a. <u>cm</u> abo	ve antecubital	cm from I	nedial joint line;
non-weightbearing position. Muscle atrophy is a difference in	Measure largest p	part of muscle belly Right	bcm bel Left	ow antecubital Right	Measure up to la	argest point of VMO. Right
circumference of > .5 cm. If difference is <= .5cm, do not	Lon	- rogni			Lort	rtigni
note muscle atrophy unless both muscles appear atrophied by			a cm	a cm		
description. Scores:			b cm	b cm		
Muscle Atrophy Scoring 0 = None.						
u = None. 1 = Mild – muscle has slightly less	contour than contralateral si	ide .				

a = Mild = muscle has slightly less contour than contra 2 = Moderate - flattening of muscle belly.
 3 = Severe - severe muscle wasting and depression.



## Colorado Adult Joint Assessment Worksheet

Date of Evaluation H H H MM DD YY

Axial Deformity	An	kle		Kr	iee
-	Left	Right		Left	Right
	valgus	valgus		valgus	valgus
Scores:					
Axial Deformity Scoring: Ankle: 0 - No deformi 1 - 1*-10* valg 2 - >10* valgu	us; 0-5 varus 1 ·	No deformity 9"-15" valgus; 0-5 varus >15" valgus or >5" varus	•	·	

Crepitus			An	kle					Elb	wo				Kn	ee		
		Left			Right			Left			Right		Left			Right	
Scores:																	
Crepitus Scoring: 0 - None. 1 - Mild - crepitus slightly present 2 - Moderate - crepitus more easi 3 - Severe - crepitus very pronoui	ly felt &	heard; more	pronou	ced cra	kling and/or	r rough s	sound or	sensation o	luring m	otion.							

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Patient ID			orado Adult essment Wo	-	Date of Evaluation	MM DD YY
Range of Motion	1	Ankle	Elt	bow	ĸ	nee
Runge er menen.	Left	Right	Left	Right	Left	Right
Dorsiflexion (DF) Extension (Ext)	(DF)	(DF)	(Ext)	(Ext)	(Ext)	(Ext)
Hyperextension (Hyp)	N/A	N/A	(Hyp)	(Hyp)	(Hyp)	(Hyp)
Plantarflexion (PF) Flexion (Flex)	(PF)	(PF)	(Flex)	(Flex)	(Flex)	(Flex)
Calculation formula						
iormal Full Range of Motion (FROM)	total 70*	total 70*	0-150*	0-150*	0-135*	0-135*
Full range of - Extension motion (FROM) - Flexion		;				
% of normal (FROM/normal x 100)	%	%	%	%	%	%
LOSS OF FROM (100% - % of normal)	%	%	%	%	%	%
Scores:						
Range of Motion Scoring: 0 - No loss. 1 - Loss of <10% of total full ROM 2 - Loss of 10% to 33% of total ful 3 - Loss of >33% of total full ROM	I. I ROM.	Note : If Joint is hyper extended When adding together f hyperextension number denominator by the deg	flex & extension, us the			
Contracture		Ankle		bow		nee
	Left	Right	Left	Right	Left	Right

	Left	Right	Left	Right	Left	Right
If DF / Ext >= 0 Then Contracture Score = 0. Otherwise Score = 1, 2 or 3.	DF	DF	Ext	Ext	Ext	Ext
Scores:						
Contracture Scoring: 0 - No contracture. 1 - 1° to 7° 2 - 8° to 15° 3 - >15°						

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## Colorado Adult Joint Assessment Worksheet

Date of Evaluation MM DD YY

Instability			An	kle					Elb	wo				Kn	ee		
		Left			Right			Left		Right		Left		Right			
Scores :																	
Instability Scoring: 0 0 = None.																	
1 = Noted on exam but doesn 2 = Instability that creates a fu						ics.											

Pain			An	kle					Elb	ow					Kr	iee		
		Left			Right			Left			Right			Left			Right	
* With Activity Scores :																		
		r	1												1			
Without Activity Scores :																I L		
Pain Scoring: * (use "With Act	vity" s	cores on fin	al scor	e sheet	.)													
0 - No Pain - No report of stiffness																		
1 = Slight or Mild - Pain or discomi	ort pres	ent at rest or	with ac	tivity. Ma	ay have mor	ning stit	fness or	stimess wit	h weath	ier chan	ges which w	orks out	with m	ovement.				
Does not interfere with activity	but acti	vity may incr	ease sy	mptoms.	May require	00036	ional no	n-marcotic pa	in med	cation.								

Does not interfere with activity but addivity may increase symptoms. May require occasional non-narcotic pain medication. 2 Moderate Pain present art sets or with activity, interferes with activity or ADL occasionally. May require more regular use of non-narcotic pain medication and occasional use of narcotic medication. 3 Severe - Limiting activity, Has regular severe pain, which limits normal activity and ADL most of the time. May require the constant use of non-narcotic pain medication and frequent or regular use of narcotic medication.

Strength Ankle Left Elbow Knee Right Right Left Left Right

																<u> </u>	
Scores :																	
Strength Scoring:																	
0 - Moves through full range of mo																	
<ol> <li>Moves through full or available</li> </ol>	range o	r motion aga	ainst gra	ivity. Ta	kes moderat	e resista	ance If f	uli range. Ta	ikes ma	ximum r	esistance if a	avallable	e range.	(Grade 4 to	5-)		
2 - Moves through full or available	range o	r motion aga	alnst gra	vity, tak	es minimal r	esistano	e (Grad	le 3 to 4-)									

1 — Noves shough full of available range of motion against gravity, takes inforeat a reason 2 — Moves through full or available range of motion against gravity, takes infinitial resistant 3 — Moves through full or available range of motion. (Grade 2+ 7-) 4 — Unable to move through full or available range due to vex/ns-s. (anything < Grade 2)</p>

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Patient ID		Joint Ass	essment Wo	rksheet	Date of Evaluation	
Splint/Orthotics	A	nkle	EI	bow	Kr	nee
-	Left	Right	Left	Right	Left	Right
Describe: 1. When it is used. 2. Why it is used. 3. Frequency of use.						
Number of hours used per week						
Scores:						
Gait	Ar Left	nkle Right	* Other Joint Interference	e: Mark "YES" to indicate	Kn Left	Right
Walking :			that the lack of capabilities	of another lower extremity t evaluation of the joint that		- signs
Stairs :			is being scored. The Galt reflect the worst observable	score for this joint should le score with an		
Running :			understanding that this join (better) if more test skills of	ould be performed. If		
Skipping : Other Joint Interference* :	Yes No	Yes No	marked "YES", the joint b score a 0 for Galt because		Yes No	Yes No
Other Joint Interference" :			performed normally.			
Scores:						
Scores:		Components:			Knee Normal Galt Co 1. Equal weight shift.	
Scores: Gait Scoring: 0 - Normal walking, stairs, running, skipping. 1 - Normal walking, abnormal stairs, running, or skipping. 2 - Abnormal walking and stairs. no further skills feeted.	Ankie Normal Galf 1. Equal weight sh 2. Heel-toe patterr 3. Good plantariler 4. Steps of equal i 5. Steps of equal i 6. Toes pointed sy	ift. I don push-off. ength.	If any of the normal gait or done correctly then the ski or skipping) will be conside knee and ankle joint indep	II (walking, stairs, running ered abnormal. Score each	<ol> <li>Heel strike with full</li> <li>Good knee extensi</li> <li>Steps of equal leng</li> <li>Steps of equal cad</li> <li>Toes pointed symmetric</li> </ol>	on push-off. gth. ience.
Gait Scoring: 0 - Normal walking, stairs, running, skipping. 1 - Normal walking, abnormal stairs, running, or skipping. 2 - Abnormal walking and stairs.	1. Equal weight sh 2. Heel toe pattern 3. Good plantame 4. Steps of equal b 5. Steps of equal of	ift. Ion push-off. ength. adence.	done correctly then the ski or skipping) will be conside	II (walking, stairs, running ered abnormal. Score each	<ol> <li>Good knee extensi</li> <li>Steps of equal length</li> <li>Steps of equal cad</li> </ol>	ion push-off. jth. ience. netrically forward.



Colorado Adult	
Joint Assessment Score S	heet

### Ankle Elbow Knee Left Right Left Right Left Right Swelling Muscle Atrophy Axial Deformity Crenitus Range of Motion Contracture Instability Pain (With Activity) Strength Splint/Orthotics Total (without Gait): Gait

Gait			
Other Joint Interference * (Yor N)			
Total (with Gait):			

### Swelling Scoring :

0 = None. 1 = Mid – slightly puffy; slight palpable swelling may not be measurable ; 2 = Moderate – looks swollen; feels firm or boggy; measurable difference; bony landmarks palpable only. 3 = Severe – looks very swollen; is tense; measurable difference; bony landmarks difficult to palpate.

## Muscle Atrophy Scoring:

0 = None. 1 = Mild — muscle has slightly less contour than contralateral side.

2 = Moderate – flattening of muscle belly. 3 = Severe – severe muscle wasting and depression.

- Crepitus Scoring:

   0 = None.

   1 = Mild crepitus slightly present; barely detectable audible or palpable sensation during motion.

   2 = Moderate crepitus more easily felt & heard; more pronouced crackling and/or rough sound or sensation during motion.

   3 = Severe crepitus svery pronounced very audible & palpable grinding & crunching during motion.

 Range of Motion Scoring:

 0 = No loss.

 1 = Loss of <10% of total full ROM.</td>

 2 = Loss of 10% to 33% of total full ROM.

 3 = Loss of >33% of total full ROM.

Contracture Scoring 0 = No contracture. 1 = 1° to 7° 2 = 8° to 15° 3 = >15°

## Instability Scoring

D = None.
 1 = Noted on exam but doesn't interfere with function or require bracing.
 2 = Instability that creates a functional deficit or requires bracing or orthotics

- requires bracing or orthotics Pain Scoring: (Use "With Activity" scores.)\* 0 = No Pain No report of stiffness, no change in activity, no use of pain medication. 1 = Slight or Mid. Pain or disconfort present at rest or with activity. May have morning stiffness or stiffness with weather changes which works out with movement. Does not interfere with activity but activity may increase symptoms. May require occasional non-narcotic pain medication. 2 = Moderate Pain present at rest or with activity. Interferes with activity or ADL occasionally. May require more regular use of nancrotic pain medication and occasional use of nancrotic pain, which limits normal activity and ADL most of the time. May require the constant use of nan-cotic pain medication and frequent or regular use of narcotic medication.

### Date of Evaluation 1 MM חח

### A xial Deformity Scoring:

- Ankle: 0 = No deformity 1 = 1°10° valgus; 0-5 varus 2 = >10° valgus or >5° varus

  - 2 = >15° valgus; 0-5 varus 2 = >15° valgus; 0-5 varus 2 = >15° valgus or >5° varus

- 2 =>15: Vargue or ~ vare.
  Strength Scoring
  0 = Moves through full range of motion against gravity, takes maximal resistance (Grade 5)
  1 = Moves through full or available range of motion against gravity. Takes moderate resistance if available range (Grade 4 to 5-)
  2 = Moves through full or available range of motion against gravity, takes minimal resistance (Grade 3 to 4-)
  3 = Moves through full or available range of motion. (Grade 2+/3-)
  4 = Unable to move through full or available range due to wakness (arbiting < Grade 2)</li>

- Splint/Orthotics Scoring D = No use of splint/orthotics. 1 = Splint/orthotic used PRN: post bleed or for
- sports, or to prevent recurrent hemarthroses 3 = Requires bracing/splinting/orthotics continuously.

- Gait Scoring 0 = Normal walking, stairs, running, and skipping. 1 = Normal walking, abnormal stairs, running, or
- skipping. 2 = Abnormal walking and stairs. no further skills tested.

Other Joint Interference Yes/No – Mark "YES" to indicate that the lack of capabilities of another lower extremity joint prevented the full Gat evaluation of the joint that is being scored. The Gat score for this joint should reflect the worst observable score with an under standing that this joint might score differently (better) if more test skills could be performed. If marked "YES", the joint being scored should not score a D for Gat because all tasks could not be performed normally.