**Instructions**: Assign a score of 0 or 1 for each completed maneuver. Maneuvers on the right and left side of the body account for one point each. Indicate 0 if the maneuver is negative; 1 if the maneuver is positive. The maneuvers are conducted as follows by the study participant, who should be barefoot:

|  |  |  |
| --- | --- | --- |
| **Movement tested**  | **R** | **L** |
| **Thumb to forearm** | Site to enter data | Site to enter data |
| **Bend little fingers back to >90°** | Site to enter data | Site to enter data |
| **Elbows hyperextend >10°**(e.g., bend backwards >10° in the wrong direction) | Site to enter data | Site to enter data |
| **Knees hyperextend >10°**(e.g., bend backwards >10° in the wrong direction) | Site to enter data | Site to enter data |
| **Palms flat to floor, legs straight** | Site to enter data |
| Total Score\* | Site to enter data |

## General Instructions

All elements on this CRF are considered Supplemental Highly-Recommended.

## Specific Instructions

Please see the Data Dictionary for definitions for each of the data elements included in this CRF Module.

* Date of test – Record the date/time according to the ISO 8601, the International Standard for the representation of dates and times ([Please click here for the International Organization for Standardization website](http://www.iso.org/iso/home.html)). The date/time should be recorded to the level of granularity known (e.g., year, year and month, complete date plus hours and minutes, etc.).
* The maneuvers are conducted as follows by the participant, who should be barefoot:
	+ **Thumb to forearm** – with the elbow and wrist flexed, the individual actively brings the thumb to the flexor aspect of the forearm. The test is positive if the thumb touches the forearm.
	+ **Bend little fingers back to >90°** – with the forearm resting on a table and pronated, using the opposite hand the individual actively brings the 5th finger back as far as it will move. The test is positive if the proximal phalanx of the 5th finger reaches > 90**°** degrees.
	+ **Elbows hyperextend >10°** – with the shoulder 90**°** degrees abducted and the hand supinated (palm up), the individual passively extends the elbow to end range, and the research assistant measures the elbow angle with a goniometer placed at the medial condyle of the humerus, aligning the goniometer arms along the radius and the humerus, respectively. The test is positive if the angle is > 190**°** degrees.
	+ **Knees hyperextend >10°** – the individual stands and passively extends the knees to end range. The research assistant measures the knee angle with the goniometer placed at the lateral epicondyle of the femur, aligning the goniometer arms along the tibia and femur, pointed toward the lateral malleolus and the greater trochanter, respectively. The test is positive if the angle is > 190° degrees.
	+ **Palms to floor** – the individual stands with legs straight and feet together, then flexes the trunk forward. The test is positive if both palms are flat on the ground.

References

1. Beighton P, Solomon L, Soskolne CL. Articular mobility in an African population. Ann Rheum Dis 1973;32:413-18.
2. Juul-Kristenson B, Rogind H, Jensen DV, Remvig L. Inter-examiner reproducibility of tests and criteria for generalized joint hypermobility and benign joint hypermobility syndrome. Rheumatology 2007;46:1835-41.