## Revised Hammersmith Scale for SMA (RHS) 17.03.2015 **SMA Type** DOB Assessor Date of assessment Albuterol/Salbutamol Y/N Date of spinal surgery Please circle highest current level of independent mobility: None Rolls **Bottom shuffles** Crawls Walks with KAFO's / AFO's Walks with crutches / frame Independent walking Comment..... LBC = Limited by contracture \*WHO separate scoring at end of RHS Instruction 2 1 0 Comments **Test** WHO 1\* Sitting Can you sit on the Using plinth / floor. Maintains seated position plinth/chair without Sitting unsupported: Unable to sit (Back / feet using your hands for via propping with hand/s: Long sitting Ring or 90/90 unsupported) support for a count of Ring or 90/90 2 Hands to head Can you show me how Able to bring both Able to bring one hand to Using Sitting position described: compensations -90/90 in sitting you get your hands to head at head - arms free from side without flexing head hand/hands to vour flexing head & trunk Ring Long same time - arms free from side without head? or "crawling" hand/s or trunk flexing head or trunk (hands touch head □ R □ L ☐ Unable to bring above level of ears/ hand to head eyebrows) Can you lie down in a 3 Sitting to lying Able to lie down Unable or completes Able to lie down by going controlled/safe way through side lying or forwards and rolling in uncontrolled/ from sitting? using clothes in a sideways, or through unsafe way controlled/safe way prone in a controlled/safe 4 Adduction Can you bring your leg Able to adduct to Holds crook lying position Unable to maintain/ $\sqcap$ R from crook back to the middle and bring 1 leg back to for a count of 3 achieve starting (hook) lying hold this position for a neutral position. supine hips @ count of 3? 45°, knees @ 90°, feet hip width apart. Passively abduct leg 5 Right hip Can you bring your Flexion contracture Full hip flexion Initiates right hip and Unable flexion in supine right knee to your > 15 ° present? knee flexion achieved chest? Try to go as far diH (>10% of available range as you can Knee of motion) 6 Left hip Can you bring your left Flexion contracture Full hip flexion Initiates left hip and knee Unable flexion in supine knee to your chest? > 15 ° present? achieved flexion Try to go as far as you Hip (>10% of available range Knee of motion) Lifts head Can you lift your head Can lift head up Can lift head with Unable from supine to look at your toes through neck flexion compensatory keeping your arms and holds for a count movements for a count of folded for a count of 3? of 3 Can lift head up momentarily through neck flexion (< a count of 3) 8 Supine to Can vou roll onto vour side-lying (end Side? Note: Onto side = shoulders perpendicular to floor, trunk and hips in line with body Able to roll onto side $\square$ R Unable to roll onto position leading side in any direction leg ends up on top ROLLING of other) 9 Rolls supine Can you roll from your Rolls fully into prone Rolls fully into prone by Unable to roll into R back to your tummy? without pulling/ pulling/pushing on arms prone in any to prone Try not to use your pushing on arms direction. Does not arms initiate or complete 10 Lifting head Can you lift your head Lifts straight up, arms Lifts straight up arms Unable or lifts less down by sides for a forward for a count of 3 from prone up keeping your arms than a count of 3 by your side for a count of 3 count of 3 LQЛ 11 Prone; prop Achieves position Maintains position with Unable or holds for Can you prop yourself on your forearms with on forearms and holds head up head supported on hands less than a count of 3 your head up (not independently for a for a count of 3 holding your head) For count of 3 a count of 3 12\* Four-point Can you get onto your Crawls moving all 4 Achieves four-point Unable WHO 2 kneeling/ hands and knees and limbs at least 2 times kneeling crawling then crawl? 13 Rolls prone Rolls fully into supine Can you roll from your Rolls fully into supine by Unable to roll into $\square$ R to supine tummy to your back? without pulling/ pulling/pushing on arms ROLLING supine in any Try not to use your pushing on arms direction. Does not initiate or complete

	Test	Instruction	2	1	0	L B C	Comments	RHS Score
ING	14 Lying to sitting	Can you get from lying (supine) to sitting?	Able via supine / side lying using:  1 hand 2 hands	Able by using strategies:  Turns into prone or towards floor  Utilises momentum/ pulls on both legs	Unable			
SITTING	15 Sit to Stand (Starting in a 90/90 position using a Plinth / Bench / Chair)	Can you stand up from the chair / bench keeping your arms folded if you can?	Able to stand up without using arms (keeping arms folded, feet do not move)	Stands by using strategies: (circle relevant)  Uses hands on legs/chair Turns Prone / Widens Base	Unable			
NG NG	16* Cruising/ supported stand	Can you walk holding on around furniture?	Cruise at least 5 steps around furniture	Stands supported for a count of 3	Unable to stand supported		WHO 3 & 4*	
STANDING	17* Standing	Can you stand without holding onto anything for a count of 3?	Stands <u>upright</u> and <u>symmetrically</u> , without compensation for a count of 3	Stands but with some degree of compensation for a count of 3	Cannot stand independently, needs support		WHO 5*	
¥	18* Walking	Can you walk without using any help or aids? Show me	Takes at least 5 steps unaided	Able to take < 5 steps unaided	Unable		WHO 6*	
RUN / WALK	19 Runs 10m	Can you go as quickly and safely as you can to(give 10 m marker) "Ready steady GO"	Can run - both feet off the ground	Speeds up walk but always maintains one foot on the floor	☐ Walks with no extra speed ☐ Only with aids ☐ Unable		TIME:seconds	
STANDING	20 Squat down and up	Can you squat down and stand up again?  Pretend you are going to sit on a very low seat - only go as far down as you are able to get up from on your own	Full squat down (without using hands) and up* (with/without using hands)  At least 90° achieved at knees/ hips  *must be able to get up from final range	Initiates squat in both knees (10° to <90°) with controlled movement +/- using hands on self  Using hands	Unable			
S	21 Stand to sit on floor	Can you sit on the floor in a controlled/ safe way from standing? Try not to use your arms	Able to sit down arms free in a controlled manner	Sits on floor using hands on floor/body	Uses furniture Unable			
	22 High kneeling	Can you kneel like this (high kneeling) for a count of 10?	Maintains high kneeling without holding on for a count of 10	Maintains high kneel with one arm support for a count of 10	Unable			
MAT	23 High Kneeling to Right half kneel	Can you bring your LEFT leg up so that your foot is flat on the ground without using your arms and hold for a count of 10?	Able to achieve and maintain position without arm support for a count of 10	Maintains half kneel with one arm support for a count of 10  With:  support  no support	Unable			
	24 High Kneeling to Left half kneel	Can you bring your RIGHT leg up so that your foot is flat on the ground without using your arms and hold for a count of 10?	Able to achieve and maintain position without arm support for a count of 10	Maintains half kneel with one arm support for a count of 10  With:  support  no support	Unable			
MAT / FLOOR	25 Rise from floor	Can you get up from the floor using as little support as possible and as fast as you can?	Achieves rise from floor without hands (any unsupported method)	Able to get up from floor using hands on floor and/or body	Able to get up from floor using furniture/ assistance		If uses ½ kneel:  R (L foot forwards)  L (R foot forwards)  Further detail:	
MAT /		Stand up as quickly as possible when the instruction "GO" is given			☐ Unable to get up from floor using any method		TIME:seconds	
IND	26 Stand on one leg – Right	Can you stand on your right leg for a count of 3?	Able to stand in a relaxed manner (no fixation) for a count of 3	Stands but either momentarily or needs a lot of fixation e.g. by knees tightly adducted or other trick	Unable			
SINGLE LEG STAND	27 Stand on one leg – Left	Can you stand on your left leg for a count of 3?	Able to stand in a relaxed manner (no fixation) for a count of 3	Stands but either momentarily or needs a lot of fixation e.g. by knees tightly adducted or other trick	Unable			
	28 Hops – Right	Can you hop on your right leg?		Distinct hop: clears forefoot and heel off floor	Unable			
	29 Hops – Left	Can you hop on your left leg?		Distinct hop: clears forefoot and heel off floor	Unable			

	Test	Instruction	2	1	0	L B	Comments	RHS Score
STAIRS	30 Ascend stairs 4 standard stairs	Can you walk up the steps?  If support is needed you may only use one rail (can use two hands to one rail)	Independently (without support/rail) ascends using alternating pattern	☐ Alternating pattern with one support (one rail/hand on body) ☐ Marking time with/without support	Unable	С		
	31 Descend stairs 4 standard stairs	Can you walk down the steps?  If support is needed you may only use one rail (can use two hands to one rail)	Independently (without support/rail) descends using alternating pattern	☐ Alternating pattern with one support (one rail/hand on body) ☐ Marking time with/without support	Unable			
STEP	32 Climbs box step – Right	Can you step onto the top of the box using your right leg first?	Faces forwards, climbs up – no support needed	Goes up sideways or needs support	Unable			
	33 Descends box step - Right	Can you step down from the box using your right leg first?	Faces forward, climbs down controlling weight bearing leg. No support needed	Goes down sideways or skips down or needs support	Unable			
	34 Climbs box step – Left	Can you step onto the top of the box using your left leg first?	Faces forwards, climbs up – no support needed	Goes up sideways or needs support	Unable			
	35 Descends box step - Left	Can you step down from the box using your left leg first?	Faces forward, climbs down controlling weight bearing leg. No support needed	Goes down sideways or skips down or needs support	Unable			
JUMP	36 Jump forwards 30cm (12")	Can you jump as far as you can, with both feet, from this line all of the way to the other line?	Jumps forward and lands with two feet simultaneously moving forward at least 30cm (12")	Jumps with two feet simultaneously but lands one at a time moving forward/up travelling < 30cm (12")  Jumps and lands with two feet simultaneously moving forward	Unable to initiate jump			
			2's =	< 30cm (12")  1's =	0's =		Total =	/69

*WHO DEVELOPMENTAL MILESTONES	Qualifier met:
W1. Sitting without support: :	Y N N
Child sits upright with head erect for at least 10 seconds. Child does not use arms or hands to balance body or support position.	1
W2. Hands and knees crawling:	
Child alternately moves forward or backward on hands and knees. The stomach does not touch the supporting surface. There are continuous and consecutive movement, at least 3 in a row.	Y
W3. Standing with Assistance:	
Child stands in upright position on both feet, holding onto a stable object (e.g. furniture) with both hands without leaning on it. The body does not touch the stable object, and the legs support most of the body weight. Child thus stands with assistance for at least 10 seconds.	Y
W4. Walking with Assistance:	
Child is in upright position with the back straight. Child makes sideways or forward steps by holding onto a stable object (e.g. furniture) with one or both hands. One leg moves forward while the other supports part of the body weight. Child takes at least 5 steps in this manner.	Y
W5. Standing Alone:	
Child stands in upright position on both feet (not the toes) with the back straight. The legs support 100% of the child's weight. There is no contact with a person or object. Child stands alone for at least 10 seconds.	Y
W6. Walking Alone:	
Child takes at least 5 steps independently in upright position with the back straight. One leg moves forward while the other supports most of the body weight. There is no contact with the person or object.	Y
Total WHO Milestones Achieved:	/ 6

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Is this test a true reflection of the subjects ability Y □ N □ If no please detail why	
Comments on Assessment	