

	_	
Parent's concerns Y/N		Child/Young Person's concerns Y/N
Developmental delay		Pain when walking

Name.....Patient A........ D.O.B...(Age 7)....... NHS Number...... Red flag checklist completed Y/N

Answer the following screening questions and then complete the assessment. Record any concerns as an X in the appropriate boxes, or a ✓ if no concerns, with comments/observations as appropriate. Score <u>ALL</u> coloured boxes that apply, then add the colour totals to the summary boxes at the end of the assessment

	<b>✓</b>	Difficulty/Restriction due to reduced ROM, contracture, swelling or pain	Difficulty/abnormality due to weakness/asymmetry/ poor quality of movement	Difficulty due to understanding/ clumsiness/ motor planning	Difficulty due to other observations e.g. hypermobility
Observation: Take T shirt off Look for any difficulties		X ↓ ROM at shoulders	Ole		
Observation: Standing posture Swelling, alignment, rash, deformity	A				

The following questions can be answered by the child or young person, or by a parent or guardian on behalf of the child.

	No concerns ✓	Comments
Do you (or does your child) have any pain or stiffness in their joints, muscles or back, that is impacting on your (their) daily life? If yes, does the pain change over the course of the day?	<b>✓</b>	
Do you (or does your child) have any difficulty getting yourself (him/herself) dressed without any help?	✓	
Do you (or does your child) have any difficulty walking from one place to another (for example walking to school)?	✓	
Do you have (or have you ever had) any concerns about your child's development (either gaining new skills or losing established skills)?		x Late in achieving milestones
When you think back, are there any skills that you have tried to learn (or teach your child to do) that have taken longer than you think it should have (for example tying shoe laces, riding a bike, playing a ball game)?		x Still has stabilisers on bike
With regards to everyday activities such as running and jumping, can you (or can your child) keep up with other children of a similar age?		x Can't keep up with peers
Would you ever describe yourself (or your child) as being 'accident prone' or more likely to have trips and falls?	✓	





Name.....Patient A....... D.O.B...(Age 7)...... NHS Number...... Red flag checklist completed Y/N

	<b>✓</b>	Difficulty/Restriction due to reduced ROM, contracture, swelling or pain	Difficulty due to weakness/asymmetry/ poor quality of movement	Difficulty due to understanding/ clumsiness/	Difficulty due to other observations e.g.
Observation: Take T shirt off Look for any difficulties	<b>✓</b>			motor planning	hypermobility
Observation: Standing posture Swelling, alignment, rash, deformity			X Flat feet, large calves?		
Walk, walk on heels then tiptoes Look at ability and foot posture, mirroring of ULs	4		X - Difficult to walk on heels due to weakness		
Hold hands out straight Elbow, wrist, finger extension					
Make a fist Supination, flexion of fingers Pinch index finger					
and thumb  Look at finger joints, functional grip					
Squeeze MCP joints Assess for tenderness Hands –	<b>√</b>				
Palm to palm/back to back Wrist flexion and extension					
Reach arms up, touch the sky, head back	<b>✓</b>				
Elbow, wrist, neck extension  Hands behind neck Shoulder abduction, external rotation	<b>*</b>				
Touch ear to shoulder Cervical spine side flexion	<b>1</b>				
Three fingers (own) in mouth Temporomandibular joints					
Feel for effusion in knees Patella tap, cross fluctuation	<b>*</b>				





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	✓	Difficulty/Restriction due to reduced ROM, contracture, swelling or pain	Difficulty/abnormality due to weakness/asymmetry/ poor quality of movement	Difficulty due to understanding/ clumsiness/ motor planning	Difficulty due to other observations e.g .hypermobility
Active movement	<b>√</b>				,
of knees		•			
Knee flexion/extension					
Leg length discrepancy	$\checkmark$				
(1cm or more)					
Eyeball or can measure					
Passive movement of	<b>√</b>				
hips					
Hip flexion/internal					
and external rotation					
Lower limb	✓				
reflexes					
Patella, ankle, Babinski					
48.6	✓				
touch toes					
Forward flexion of					
spine					
Head raise in supine Chin towards chest			X side		
in midline			flexed		
Rise from the floor (from					
supine) in less than			X Slower		
3 seconds					
Look for Gowers', quality of					
movement, use of furniture					
Functional squat to floor					
and rise (to retrieve toy)			X Difficult		
Standing on one leg					
right and left eyes open		•	X		
age 5-6 up to 10 seconds					
<b>age 7-10</b> > than 10 seconds					
Stand on one leg R and L eyes					
closed (aged 7-10 only)			X		
Hopping			44		
age 5-6 up to 5 hops			X unable		
age 7-10 > 5 hops					
Jump 2 feet together	✓				
Age 5-6 3 times					
age 7-10 (3 forward, 2					
back, 1 left)					
Ball skills -throw and					
catch small ball			X		
Age 5-6 2 times (both					
hands)					
Age 7-10 5 times (dominant hand)					



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Screening questions	Comments
Do you (or does your child) have any pain or stiffness in their joints,	
muscles or back, that is impacting on your (their) daily life? If yes, does	
the pain change over the course of the day?	
Do you (or does your child) have any difficulty getting yourself	
(him/herself) dressed without any help?	
Do you (or does your child) have any difficulty walking from one place to	
another (for example walking to school)?	
Do you have (or have you ever had) any concerns about your child's	Late in achieving
development (either gaining new skills or losing established skills)?	mílestones
When you think back, are there any skills that you have tried to learn (or	Still has
teach your child to do) that have taken longer than you think it should	stabilisers on bike
have (for example tying shoe laces, riding a bike, playing a ball game)?	
With regards to everyday activities such as running and jumping, can you	Can't keep up
(or can your child) keep up with other children of a similar age?	Can't keep up with peers
Would you ever describe yourself (or your child) as being 'accident	
prone' or more likely to have trips and falls?	



Observations and Examination						
	Observations/Appearance	Clinical findings	Comments			
	(✓ if no concerns), X if					
	concerns					
Posture	X	Flat feet, large				
		calves				
Gait	X	Unable to walk				
		on heels				
Arms	✓					
Legs	✓					
Spine	✓					
Plus (Function,	Х	Unable to	Weakness in			
skill, movement)		stand on one	skills against gravity			
		leg or hop	gravíty			
		Difficulty with				
		head raise				
		and squat				
		Slow to get up				
		from floor				



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# Mostly yellows – could indicate an inflammatory disorder such as Juvenile Idiopathic Arthritis

Score 0

Further examination of swelling or signs of inflammation in joints

+

#### **Additional Tools**

Recognition from visual appendices (swollen joints, fixed deformities, compare to MPS)

paediatric musculoskeletal matters pREMS assessment

Consider hypermobility BSR Guidance/RCPCH Position Statement

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#### **Refer to Paediatric Rheumatology Service**

# Mostly oranges – could indicate a Lysosomal storage disorders such as Mucopolysaccharidoses

Score 0

Stiffness or contracture of upper limb joints, in the absence of swelling can be a sign of a lysosomal storage disorder, such as the mucopolysaccharidoses

+

#### **Additional Tools**

Recognition from visual appendices (restriction of UL joints in the absence of swelling, gibbus deformity, compare to JIA)

Resources from MPS Society MPS Society Resources

paediatric musculoskeletal matters pREMS assessment

Consider hypermobility BSR Guidance/RCPCH Position Statement

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### **Refer to Specialist Genetic Centre**

# Mostly blues – could indicate a neuromuscular disorder such as Duchenne muscular dystrophy

Score

Assess for functional muscle weakness and delay/regression in motor milestones

+

#### **Additional Tools**

Recognition from visual appendices (calf hypertrophy, Gowers' sign, scapular winging)

Think MUSCLE

Fox et al, BMJ, 2020;368:I7012

Treat -NMD Neuromuscular network treat-nmd.org

=

**Refer to Specialist Genetic Centre** 



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# Mostly purples – could indicate an underlying neurological disorder or an orthopaedic condition

Further assessment of asymmetry of limbs and spine, muscle tone, muscle bulk, range of movement.

Score 8

+

**Additional Tools** 

Further assessment of muscle tone

paediatric musculoskeletal matters pREMS assessment

Hip rotational profiles Staheli et al 1985

=

### Refer to General/Community Paediatrician or Orthopaedic Surgeon

## Mostly greens – issues with motor planning and gross/fine motor skills

This may warrant further assessment by Paediatric Physiotherapy and/or Occupational Therapy, or a general paediatrician

Score 0

+

#### **Additional Tools**

Screening activities and gross motor chart Missiuna et al, 2006

CanChild resources for professionals CanChild.ca

<u>DCDQ-07 Questionnaire</u> Wilson and Crawford, Physical and Occupational Therapy in Pediatrics, 2012

Consider hypermobility BSR Guidance/RCPCH Position Statement

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### Refer to local Physiotherapy/Occupational Therapy Service or Paediatrician

# Mostly pinks – issues with pain, balance and motor skills may indicate hypermobility

If no evidence of serious pathology, offer advice, education and reassurance

Score 0

+

#### **Additional Tools**

paediatric musculoskeletal matters pREMS assessment

Consider hypermobility BSR Guidance/RCPCH Position Statement

=

Reassurance, education and advice, onward referral if necessary