The McKenzie Institute International

CENTRE FOR POSTGRADUATE STUDY IN MECHANICAL DIAGNOSIS AND THERAPY

International Credentialling Exam

Information for Candidates

TABLE OF CONTENTS

Contents

We would like to take this opportunity to thank you for your interest in The McKenzie Institute International Credentialling Examination.

This examination has been designed to recognise the clinician utilising the McKenzie Method of Mechanical Diagnosis and Therapy in the treatment of patients.

Contained in this document is the information you need to prepare yourself for the examination.

If you have any questions or concerns after reading the document, please contact:

The McKenzie Institute USA
432 N Franklin Street, Suite 40
Syracuse, NY 13204
info@mckenzieinstituteusa.org
800-635-8380 or 315-471-7612

1. PURPOSE

The McKenzie Institute conducts the Credentialling Examination to:

- Establish a standard of minimum competence in the application of the McKenzie Method of Mechanical Diagnosis and Therapy.
- Identify and recognise the clinician who has demonstrated basic competency in the McKenzie Method of Mechanical Diagnosis and Therapy (MDT).
- Develop a referral network of MDT qualified clinicians.

2. ELIGIBILITY

You are eligible to register for the Credentialling Examination if you have completed Parts A, B and C and D since the inclusion of extremities of the McKenzie Institute International Education Programme and are a licensed clinician in USA. The Advanced Extremities course is strongly encouraged.

Applicants will need to provide a copy of their professional license with their registration form to verify eligibility and active licensure. Applicants who took courses outside the USA will need to provide evidence of their attendance from other Institute branches or MII head office for all required courses.

If there are any health, learning issues or disabilities that may influence your participation in this examination, please contact the Institute. MIUSA complies with the Rehabilitation Act of 1973, the Americans with Disabilities Act, and applicable state and local laws providing for non-discrimination against qualified individuals with disabilities. This policy applies to participation in all Institute programs and activities. We will make every reasonable effort to make proper accommodations for you.

3. APPLICATION

3.1 Application Form

Register online or download the Exam Registration form from The McKenzie Institute USA website: https://www.mckenzieinstituteusa.org/forms.cfm
You will be able to upload a copy of your license during online registration or you must fax/mail a copy with registrations faxed or mailed.

3.2 Acceptance of Application

Once your application has been accepted and processed, you will receive a letter of confirmation which will provide you with the details relating to the exam including location and where appropriate accommodation information.

In addition, you will receive a sample of the Attestation and Confidentiality Agreement with your confirmation letter. This Agreement indicates that you have read this Information for Candidates Manual, and hence you are informed of the content and procedures of the exam. An *Illustration* of the Agreement can be found on page 7.

You will be required to show a photo ID (i.e., driver's license, passport) when you arrive at the exam site to register. You will also be provided a copy of the Attestation and Confidentiality Agreement that you will be required to sign before you can sit the exam.

3.3 Number of Candidates

Exams are typically limited to 25 participants including up to five retakes. Where the exam places are limited, applications are accepted in the order they are received.

3.4 Examination Fee

The cost of the examination is:

Description	Fee
Examination	**$500**
Retake of Exam:	
Whole Exam	**$250**
Written Portion Only	**$200**
Performance Simulation Only	**$50**

3.5 Cancellations, Transfers & Refunds

3.5.1 Cancellations

If you must cancel your registration after receiving your letter of confirmation, you must submit a written notice to qualify for a transfer or possible refund. Refund requests are subject to a minimum $100 cancellation fee.

3.5.2 Transfers

The Institute will accommodate one transfer opportunity without penalty for up to one year from the date a written confirmation of cancellation is received and only if the cancellation request occurs before the exam date or an emergency circumstance occurs onsite prohibiting the candidate from completing the exam.

3.5.3 Refunds

The refund policy is as follows:

Period	Refund Amount
Prior to 4 weeks before the exam	$400.00
2-4 weeks before the exam	$200.00
Less than 2 weeks before the exam	No refund

4. FORMAT OF THE EXAMINATION

Every component of the International Credentialling Examination has been reviewed by The McKenzie Institute International Education Council.

4.1 Content Areas

Since the primary objective of this Credentialling Exam process is the assessment of clinical skills and clinical decision-making processes, the format of this examination is multi-method testing.

Each method has been selected for its perceived suitability in testing one or more of the content areas.

The content areas are as follows:

- *History*
- *Physical Examination*
- *Provisional Classification*
- *Principles of Management*
- *Follow up Evaluation*
- *Prevention of Reoccurrence*
- *Clinician Procedures*

In person examination format:

The exam is divided into a morning session and afternoon session. Each session will be approximately three to four hours in length to allow adequate time for completion of each section.

The morning session will comprise the following methods: paper-and-pen, chart evaluations and case studies with a short break after the paper and pen section.

The afternoon session will comprise the audio-visual presentation and performance simulation. Individual times will be assigned in advance for the performance simulation section.

4.2 Methods

The testing methods currently used in the examination are paper-and-pen, chart evaluations, case studies, audio-visual presentation, and performance simulation. A description and goal of each method is given below.

4.2.1 Paper-and-Pen

The written examination is administered in a multiple-choice format that focuses on assessing the candidate's knowledge of all content areas.

4.2.2 Chart Evaluations

Based on an actual patient's records, a patient's history and/or physical examination findings are presented on a McKenzie Institute International Assessment Form. A sample of the version used on the exam is included in this manual. This section focuses on the interpretation of the written history and physical examination form, a principle of management identifying contraindications and the need for additional testing or medical procedures. The testing format is multiple-choice questions.

4.2.3 Case Study

Written case histories are presented on a McKenzie Institute International Assessment Form (sample forms are included in this manual). Multiple-choice questions are asked that focus on evaluating the patient, provisional classification, developing a principle of management, and selecting treatment procedures. This section also focuses on follow up evaluation and reassessment concepts.

4.2.4 Audio-Visual Presentation

A video is presented of a patient undergoing a history, physical examination, and/or a principle of management plus/minus a procedure in a clinical setting. Multiple-choice questions assess the candidate's ability to record, analyse and interpret the History, Physical Examination, including the patient's movements and static postures, conclusions, the clinician / patient communications, and the proposed management plan.

4.2.5 Performance Simulation

This section is used to examine the candidate's ability to competently perform MDT clinician procedures. Three procedures are randomly selected for each exam.

PLEASE NOTE:

Any procedures taught on Parts A – D courses, included in the course manuals and demonstrated in the procedure videos (excluding manipulation), can be tested in the exam. Be sure that you are familiar with, and have practised performing, all procedures.

5. PASSING GRADE

The purpose of the Credentialling Examination is to assure the patient, the medical community, and the McKenzie Institute International that the clinician has attained a minimum level of competency in MDT. Because of this philosophy, a predetermined passing grade for the exam has been established based on field testing and on the Anghoff procedure for determining passing points for examinations.

The exam is divided into two sections:

- **Section 1:** Paper and Pen, Chart Evaluations, Case Studies and Audio-Visual Presentation. (In total 89 multiple choice questions).
- **Section 2:** The Performance Simulation. (In total 3 clinician procedures)

A candidate must pass both sections. The passing score for Section 1 is 65 points, and the passing score for Section 2 is a total of 230 points **WITH** a required minimum of 60 points for **each** procedure performed.

A candidate is able to re-take the exam if they do not achieve a pass. If a candidate passes only one section, then they only have to re-take the section they failed. A candidate may retake either or both sections of the exam up to three times. If they are not successful after three attempts, direction for remedial study is strongly recommended and can be provided by the faculty of the Branch conducting the exam. A retake of failed sections of the exam needs to be completed within five years of the date of the initial exam.

If the Performance simulation section is failed, the candidate will be required to retest on at least one of the previously failed techniques plus the selected techniques for that day's exam. At times, this may mean 4 techniques are tested for that candidate.

You will receive your results by mail within 2-3 weeks of the exam date.

6. INFORMATION AND REGULATIONS FOR THE EXAMINATION

1. Be sure to arrive at the exam venue no later than 15 minutes before the scheduled commencement time of the exam.
2. Bring your photo I.D.
3. No visitors are permitted at the exam venue.
4. Notepaper, books, notes, etc. are not permitted in the exam room. Notepaper and pencils will be provided and collected at the end of the exam.
5. Once the test has begun, you may leave the exam room only with the examiner's permission. The time lost whilst absent from the room cannot be made up.
6. You can be dismissed from the examination for:
    a. Impersonating another candidate
    b. Creating a disturbance
    c. Giving or receiving help on the exam
    d. Attempting to remove exam materials or notes from the room
    e. Using notes, books, etc. brought in from outside.
7. Prior to the start of the exam, you will be asked to sign and date the Attestation and Confidentiality Agreement. **(An illustration of the Attestation and Confidentiality Agreement is on the next page.)**

ILLUSTRATION

ATTESTATION AND CONFIDENTIALITY AGREEMENT

ATTESTATION
By signing this document, I hereby attest to having read the INTERNATIONAL CREDENTIALING EXAM – INFORMATION FOR CANDIDATES MANUAL (v. January 2023) and that I am informed about the content and procedure of the Credentialling Exam. I am further aware and understand that the minimum requirements to pass the exam are 65 points for Section 1, and a total of 230 points and a minimum 60 points for each procedure performed for Section 2.

CONFIDENTIALITY
In order to make The McKenzie Institute Credentialing Examination fair for all candidates and to protect the confidentiality of the candidates, you must sign this agreement. Refusal to sign will result in your inability to take the written or practical portions of the examination.

You agree not to divulge or discuss with anyone the contents of the written and practical examinations, the names of the other candidates taking the written and practical examinations, and how many candidates participated in the written and practical examinations.

Any and all content utilized in and developed for The McKenzie Institute Credentialing Examination, including the written and practical examinations, is the exclusive property of The McKenzie Institute International, licensed to The McKenzie Institute USA, and is protected by United States and international copyright laws.

Furthermore, all such content included in The McKenzie Institute Credentialing Examination is deemed proprietary and confidential information, and shall not be disclosed, copied, re-created, or forwarded by any candidate taking the examination. Any disclosure of this confidential or proprietary information will be deemed an infringement of United States and international copyright law, and may result in disciplinary action, including criminal and civil liability.

Furthermore, breach of this agreement will result in the forfeiture of your certification and a permanent restriction on retaking either the written or practical examinations.

Exam Candidate Name will be printed here (Please sign above)

Date signed

Exam #:
Student #:

7. PREPARATION FOR THE EXAMINATION

7.1 Pre-requisites

The following courses are the mandatory prerequisite for this examination:

Courses A, B, C, and D offered only through The McKenzie Institute:

- Part A: MDT: The Lumbar Spine
- Part B: MDT: Cervical & Thoracic Spine
- Part C: MDT: Advanced Lumbar Spine and Extremities - Lower Limb
- Part D: MDT: Advanced Cervical & Thoracic Spine and Extremities - Upper Limb

7.2 Preparation Materials

In preparation for this exam, use of the following materials is recommended:

1. "The Lumbar Spine – Mechanical Diagnosis and Therapy®" (second edition 2003 Volumes One and Two), "The Cervical and Thoracic Spine – Mechanical Diagnosis and Therapy®" (second edition 2006 Volumes One and Two), "The Human Extremities – Mechanical Diagnosis and Therapy®", all written by Robin McKenzie and Stephen May.

   (Available through OPTP).
2. Course manuals, notes, and *Treat Your Own Back / Treat Your Own Neck / Treat Your Own Shoulder / Treat Your Own Knee/Treat Your Own Hip books*.
3. Attending Clinical Decision Making and Advanced Procedure Courses
4. Take the Online Case Manager Course.
5. Official Institute online materials – MDT procedure videos**, webinars, past issues of the IJMDT, MDT World Press and JMMT.
6. Retake (audit) any component of the Institute's International Education Programme.

** Once you receive your letter of confirmation, you will have immediate full access to the MDT procedure videos library. Select the Resource Centre on the MIUSA website and link to MDT Procedure Videos – you will be prompted to log in and then select the Components Procedures Quick Access button. If you have any difficulties logging in, email info@mckenzieinstituteusa.org.

7.3 Instruction Prior to Exam

Candidates cannot receive any form of instruction or feedback from Institute faculty or examiners, nor can faculty or examiners provide any instruction or feedback to candidates relating to any component of the examination including but not limited to the Performance Simulation within two weeks before the exam.

8. SAMPLE QUESTIONS AND INFORMATION ABOUT THE EXAMINATION

To familiarise yourself with the format prior to the exam, the following are sample questions for the Paper/Pen, Chart Evaluation and Case Study sections of the Credentialling Exam together with the directions. *(Answer key provided on the last page.)*

8.1 Paper/Pen

Read each question and all answers, and then decide which is the best answer. There is only one correct answer for each question. You will not be given credit for any question for which you indicate more than one answer or for any that you do not answer. There is no penalty for guessing.

1. On the initial assessment of a 27-year-old male patient presenting with intermittent left back and left posterior thigh and calf pain, lumbar ROM shows a moderate loss of flexion and minimal loss of extension. With repeated movement testing RFIS (repeated flexion in standing) produces back and leg pain which is no worse after and has no effect on movement baselines, REIS (repeated extension in standing) has no effect during and after, RFIL (repeated flexion in lying) has no effect during and after, REIL (repeated extension in lying) produces low back strain which is no worse after and has no effect on movement baselines. Based on the assessment findings your provisional classification is Lumbar Adherent Nerve Root. His history is consistent with a derangement six months ago after a lifting injury. He has not received any previous care. He is scheduled for a follow up review in 48 hours. What are the appropriate self-treatment exercise recommendations until his review?

a. RFIL (Repeated Flexion in Lying) 10/2hours, RFIS (Repeated Flexion in Standing) 10/2hours starting at midday, REIL (Repeated Extension in Lying) after either RFIL and RFIS for prevention, postural advice

b. RFIS (Repeated Flexion in Standing) 10/2hours, REIL (Repeated Extension in Lying) after the RFIS for prevention, postural advice

c. RFIL (Repeated Flexion in Lying) 10/2hours, REIL (Repeated Extension in Lying) after the RFIL for prevention, postural advice

d. RFIS (Repeated Flexion in Standing) 10/2hours, REIS (Repeated Extension in Standing) afterwards for prevention, postural advice

2. A 32-year-old female patient presents with pain located equally across the base of the neck, the right scapula and right upper arm. All symptoms are constant. She reports that during the test movements of repeated retraction her symptoms are felt a bit more with each movement, but are about the same when she returns to the starting position. How should the response to repeated retraction be recorded on the evaluation form?

a. Increase, No Worse

b. Produce, No Worse

c. Increase, Worse

d. Produce, Worse

3. Which of the following symptoms would most strongly indicate consideration of Serious Pathology in a patient presenting with complaint of headache?

a. Associated symptoms of dizziness and nausea when moving the head.

b. Progressive worsening of temporal/occipital headache with visual changes not associated with movement.

c. Headache aggravated with routine activity which worsens as the day progresses.

d. Difficulty sleeping due to being unable to find a comfortable position.

4. A patient with central symmetrical low back pain returns for follow up treatment 24 hours after the initial assessment. What should the follow-up evaluation include?

a. Review location, frequency and intensity of symptoms, effect of posture change, and test the response to repeated lumbar flexion and extension.

b. Review symptomatic presentation, adherence to and performance of the home programme; retest all repeated movements for mechanical baselines.

c. Review the symptomatic baselines, functional baselines, mechanical baselines, and the effect of posture change.

d. Review the symptomatic and functional presentation, review adherence with posture recommendations and performance of the home programme. Retest appropriate key physical examination baselines.

8.2 Chart Evaluations and Case Studies

These sections of the examination consist of multiple-choice questions.

1. On the Chart Evaluations, you will have one of the following:

- A completed history and physical examination assessment sheet
- A completed history sheet only
- A completed physical examination sheet

The assessment sheets and questions will be clearly marked ‘Evaluation 1, 2, 3’.

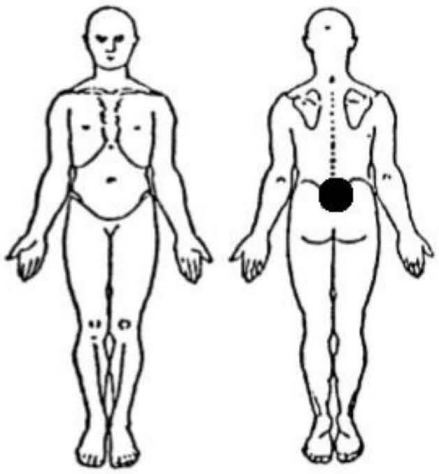
2. With the Case Studies, you will have completed:

- History
- Physical Examination Sheets, and
- Follow up visits

The Case Studies and questions are clearly marked ‘Case Study 1, 2, 3’ etc.

CHART EVALUATION EXAMPLE: HENRY

THE McKENZIE INSTITUTE
LUMBAR SPINE ASSESSMENT



Date

Name Henry Gender M

Address

Telephone

Date of Birth Age 32

Referral: *GP / Orth / (Self) / Other*

Work demands Dentistry student, predominantly sitting

Leisure activities Gym work out 4-5x per week

Walking dog

Functional limitation for present episode Difficulty dressing lower ½

Not been able to go to the gym

Outcome / Screening score

NPRS (0-10) 2-7/10

Present symptoms As per body chart

Present since 7 days *improving / (unchanging) / worsening*

Commenced as a result of Fell backwards off approx. 0.5m (2ft) wall and landed on back no apparent reason

Symptoms at onset: *(back) / thigh / leg*

Constant symptoms: *(back) / thigh / leg* Intermittent symptoms: *back / thigh / leg*

Worse *bending* *sitting* ~~*/ rising*~~ (2 hrs) *standing* (> 20 mins) *walking* (> 20 mins) *lying*

am / as the day progresses / pm *when still / on the move*

other

Better *bending* *sitting* *standing* *walking* *lying*

am / as the day progresses / pm *when still / on the move*

other

Disturbed sleep *yes / (no)* Sleeping postures: *prone / sup / side R / L* Surface:

Previous spinal history Nil

Previous treatments Nil

SPECIFIC QUESTIONS

~~*Cough*~~ / ~~*sneeze*~~ / ~~*strain*~~ Bladder / Bowel: *(normal) / abnormal* Gait: *(normal) / abnormal*

Medications: Nil

General Health / Comorbidities: Good general health, stressed about exams and being able to sit to do them

Recent / relevant surgery: *yes / (no)*

History of cancer: *yes / (no)* Unexplained weight loss: *yes / (no)*

History of trauma: *yes / (no)* Imaging: *yes / (no)*

Patient goals / expectations: 1. To be able to sit for exams without pain 2. Dress lower ½ 3. Return to the gym

McKenzie Institute International 2020©

EXAMINATION

POSTURAL OBSERVATION

Sitting: *lordotic / neutral / kyphotic* Change of posture: *better / worse / no effect* _____

Standing: *lordotic / neutral / kyphotic* Lateral shift: *right / left / nil* Shift relevant: *yes / no*

Other observations / functional baselines: _____

NEUROLOGICAL

Motor deficit _____ Reflexes _____

Sensory deficit _____ Neurodynamic tests _____

MOVEMENT LOSS	Maj	Mod	Min	Nil	Symptoms
Flexion					
Extension					
Side gliding R					
Side gliding L					
Other					

TEST MOVEMENTS **Describe effect on present pain – During:** produces, abolishes, increases, decreases, no effect, centralising, peripheralising. **After:** better, worse, no better, no worse, no effect, centralised, peripheralised.

	Symptomatic response		Mechanical response	
	During testing	After testing	Effect - ↑ or ↓ ROM or key functional test	No effect
Pretest symptoms standing				
FIS				
Rep FIS				
EIS				
Rep EIS				
Pretest symptoms lying				
FIL				
Rep FIL				
EIL				
Rep EIL				
Pretest symptoms				
SGIS - R				
Rep SGIS - R				
SGIS - L				
Rep SGIS - L				
Other movements				

STATIC TESTS

Sitting slouched / erect / lying prone in extension / long sitting _____

OTHER TESTS _____

PROVISIONAL CLASSIFICATION

Derangement Central or symmetrical Unilateral or asymmetrical above knee Unilateral or asymmetrical below knee

Directional Preference: _____

Dysfunction: Direction _____ **Postural** **OTHER** subgroup: _____

POTENTIAL DRIVERS OF PAIN AND / OR DISABILITY Comorbidities Cognitive - Emotional Contextual

Descriptions: _____

PRINCIPLES OF MANAGEMENT

Education _____

Exercise type _____ Frequency _____

Other exercises / interventions _____

Management goals _____

_____ Signature _____

McKenzie Institute International 2020©

Chart Evaluation Question (Henry)

5. Based on the information from the history, what provisional classification(s) are still a consideration?

a. Derangement Syndrome, Trauma/Recovering Trauma, Serious Pathology

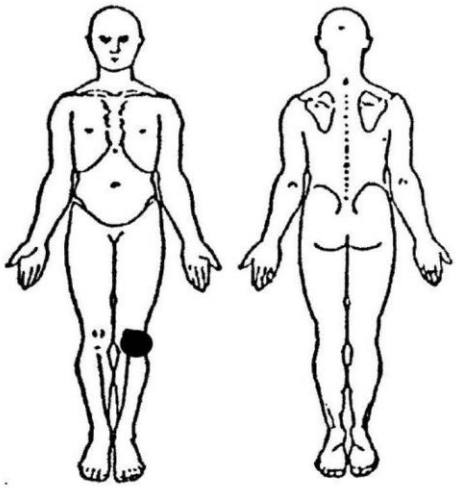
b. Derangement Syndrome

c. Derangement Syndrome, Serious Pathology

d. Derangement Syndrome, Trauma/Recovering Trauma

CASE STUDY EXAMPLE: KHAN – Assessment and Follow-up

THE McKENZIE INSTITUTE
LOWER EXTREMITIES ASSESSMENT



Date

Name Khan Gender M

Address

Telephone

Date of Birth Age 48

Referral (GP) / Orth / Self / Other

Work demands Government administrator 40 hrs/week

Leisure activities Running 5x per week

Functional limitation for present episode: Difficulty with running

Outcome / Screening score

NPRS (0-10) 0-7/10

Present symptoms As per body chart

Present since Four months — improving / (unchanging) / worsening

Commenced as a result of Fell and landed on flexed knee — no apparent reason

Symptoms at onset As per body chart — Paraesthesia: yes / (no)

Spinal history Nil — Cough / Sneeze +ve / (-ve)

Constant symptoms: — Intermittent symptoms: X

Worse (bending) ~~sitting~~ / rising / first few steps ~~standing~~ walking stairs (squatting / kneeling)
~~am~~ / as ~~the day progresses~~ / ~~pm~~ when still / ~~on the move~~ Sleeping: prone / sup / side R / L
Other getting in and out of car

Better ~~bending~~ ~~sitting~~ ~~standing~~ walking stairs squatting / kneeling
~~am~~ / as ~~the day progresses~~ / ~~pm~~ when still / ~~on the move~~ Sleeping: prone / sup / side R / L
other Sleeping with pillow under knee sometimes helps

Continued use makes the pain: better (worse) no effect Disturbed sleep yes / no

Pain at rest yes / no Site: back / hip / (knee) / ankle / foot

Other Questions: swelling catching / clicking / ~~locking~~ giving way / ~~falling~~

Previous history No past history

Previous treatments Nil

Medications Initially NSAIDS no effect, so stopped

General health / Comorbidities: hypertension

Recent / relevant surgery: yes / (no)

History of cancer: yes / (no) Unexplained weight loss: yes / (no)

History of trauma: yes / (no) Imaging: (yes) / no

Patient goals / expectations: Running no pain, stairs no pain

McKenzie Institute International 2020©

EXAMINATION

POSTURAL OBSERVATION

Sitting: *lordotic / (neutral) / kyphotic* Change of posture: *better / worse / (no effect)* Standing: *lordotic / (neutral) / kyphotic*

Other observations: _____

NEUROLOGICAL: (NA) motor / sensory / reflexes / neurodynamic _____

BASELINES: Pain and functional activity squat 1/2 range NPRS 7/10, descending step NPRS 4/10

EXTREMITIES *hip / (knee) / ankle / foot* _____

MOVEMENT LOSS	Maj	Mod	Min	Nil	Symptoms
Flexion			X		knee
Extension			X		knee
Dorsi Flexion					
Plantar Flexion					
Other:					

	Maj	Mod	Min	Nil	Symptoms
Adduction / Inversion					
Abduction / Eversion					
Internal Rotation					
External Rotation					
Other:					

Passive Movement: note symptoms, range and +/- over pressure: _____	PDM	ERP
Flex min loss +OP		X
Ext min loss +OP		X

Resisted test pain response Knee flexion no pain or weakness, Knee extension no pain but weakness 4/5

Other tests / static positioning McMurray's produces concordant pain

SPINE

Movement Loss Nil

Effect of repeated movements NE

Effect of static positioning _____

Spine testing *(not relevant) / relevant / secondary problem* _____

Baseline Symptoms _____

Repeated Tests	Symptomatic Response		Mechanical Response	
Active / Passive movement, resisted test, functional test	**During** Produce, Abolish, Increase, Decrease, NE	**After** Better, Worse, NB, NW, NE	**Effect** ↑ or ↓ ROM, strength or key functional test	No Effect
Rep Ext	Produce	NW		X
Rep Flex	Produce	NW		X
Rep Flex with patient OP	Produce	NW	Dec Ext NE Flex/Squat	
Rep Ext with patient OP	Produce	NW		X
Rep Ext with patient OP in standing	Produce	NW	Inc Ext NE Flex/Squat	

PROVISIONAL CLASSIFICATION **Extremities** **Spine**

(Derangement) _____ Directional Preference Extension

Dysfunction: Articular / Contractile _____ **Postural** **OTHER** subgroup: _____

POTENTIAL DRIVERS OF PAIN AND / OR DISABILITY Comorbidities Cognitive - Emotional Contextual

Descriptions: _____

PRINCIPLES OF MANAGEMENT

Education Traffic light guide for symptom response

Exercise type Rep knee ext with OP in standing Frequency 10-15 reps every 2 hrs

Other exercises / interventions _____

Management goals 1. To be able to go down stairs no pain 2. To be able to squat no pain 3. Resume running

_____ Signature _____

McKenzie Institute International 2020©

Case Study Questions (Khan)

History - Khan reports that symptomatically and functionally he feels he is unchanged. He has been consistent with the exercises in terms of repetitions and frequency; they produce knee pain during but are no worse after.

Physical Examination – Baseline symptoms nil. Functional baseline tests as per initial assessment.
Movement Loss - Flexion nil loss ERP with overpressure, extension nil loss ERP with overpressure. Resisted tests - no pain or weakness with flexion or extension. McMurray's produces concordant pain.

6. Based on the information gathered on Day 2, what is the interpretation and how should management proceed?

a. There is a green light response therefore the loading strategy should remain unchanged.

b. There is a green light response, however, to try and change the symptomatic and functional baselines increase the repetitions and frequency of his current exercise.

c. There is a green light response, however, to try and change the symptomatic and functional baselines, explore the force progression of clinician overpressure.

d. There is a green light response, however, to improve the symptomatic and functional baselines, utilise the force progression of knee extension with femoral external rotation.

Day 3 (2 weeks after initial assessment)

History - Khan reports that symptomatically pain is less 0-3/10 but he is still experiencing occasional clicking and sensations of giving way and does not feel confident in his knee to run on it. Stairs are pain free, but squatting and kneeling still produce pain. He has been consistent with the exercises in terms of repetitions and frequency; the exercises have no effect during or after.

Physical Examination – Baseline symptoms nil. Squat and kneeling both produce pain at end range.
Movement Loss - Flexion nil loss ERP with overpressure, extension nil loss no pain with overpressure. Resisted tests no pain or weakness with flexion or extension. McMurray's produces concordant pain.

7. Based on the information gathered on Day 3, how should management proceed?

a. Commence recovery of function with a graded strengthening and running programme.

b. Test the response to knee extension with overpressure combined with lateral forces.

c. Address the cognitive barriers around fear of resuming running.

d. Refer for imaging to rule in/out Structural Compromise.

Answer Key: 1. C; 2. A; 3. B; 4. D; 5. A; 6. C; 7. B

8.3 Audio-Visual Section

8.3.1 Information

This section of the examination uses a video. Please familiarise yourself with the directions for this section, and the standard McKenzie Assessment Forms that follow.

The Audio-Visual exam is divided into different sections:

- History
- Physical Examination
- Provisional Classification
- Principles of Management
- Follow Up Evaluation.

8.3.2 Procedure

You will:

- Watch a video of a clinician examining and treating a patient, including a follow up evaluation.
- Listen and observe.
- Complete the assessment form provided based on what is being said and done by both the clinician and the patient.
- Refer to the information you have recorded on your assessment form to help you answer the questions.
- You will be asked questions regarding the history, physical examination, provisional classification, principle of management provided by the clinician and the follow up evaluation.

After each section, the video will be stopped. An allotted amount of time will be given to answer questions regarding that section.

8.4 Performance Simulation

8.4.1 Information

This section is used to examine the candidate's ability to competently perform MDT clinician procedures.

8.4.2 Procedure

You will be asked to perform three of the MDT clinician procedures as taught on Parts A - D courses and demonstrated in the procedure videos. A model is provided for the procedures.

Three procedures are randomly selected for each exam.

We wish you every success with
The McKenzie Institute International Credentialling Examination

APPENDIX

MDT Assessment Forms

THE McKENZIE INSTITUTE
LUMBAR SPINE ASSESSMENT

Date _____

Name _____ Gender _____

Address _____

Telephone _____

Date of Birth _____ Age _____

Referral: *GP / Orth / Self / Other* _____

Work demands _____

_____

Leisure activities _____

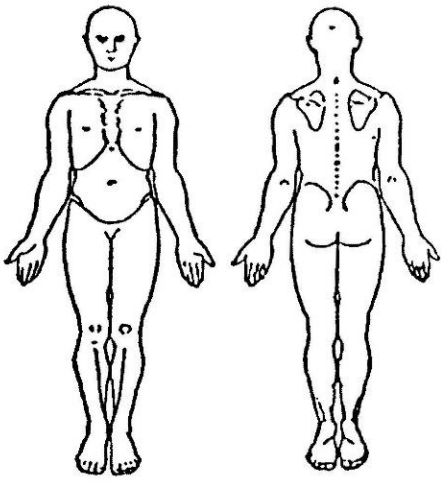
_____

Functional limitation for present episode _____

_____

Outcome / Screening score _____

NPRS (0-10) _____



Present symptoms _____

Present since _____ *improving / unchanging / worsening*

Commenced as a result of _____ no apparent reason

Symptoms at onset: *back / thigh / leg* _____

Constant symptoms: *back / thigh / leg* _____ Intermittent symptoms: *back / thigh / leg* _____

Worse *bending* *sitting / rising* *standing* *walking* *lying*
am / as the day progresses / pm *when still / on the move*
other _____

Better *bending* *sitting* *standing* *walking* *lying*
am / as the day progresses / pm *when still / on the move*
other _____

Disturbed sleep *yes / no* Sleeping postures: *prone / sup / side R / L* Surface: _____

_____

Previous spinal history _____

_____

Previous treatments _____

_____

SPECIFIC QUESTIONS

Cough / sneeze / strain Bladder / Bowel: *normal / abnormal* Gait: *normal / abnormal*

Medications: _____

General Health / Comorbidities: _____

_____ Recent / relevant surgery: *yes / no* _____

History of cancer: *yes / no* _____ Unexplained weight loss: *yes / no* _____

History of trauma: *yes / no* _____ Imaging: *yes / no* _____

Patient goals / expectations: _____

_____

McKenzie Institute International 2020©

EXAMINATION

POSTURAL OBSERVATION

Sitting: *lordotic / neutral / kyphotic* Change of posture: *better / worse / no effect* _____

Standing: *lordotic / neutral / kyphotic* Lateral shift: *right / left / nil* Shift relevant: *yes / no*

Other observations / functional baselines: _____

NEUROLOGICAL

Motor deficit _____ Reflexes _____

Sensory deficit _____ Neurodynamic tests _____

MOVEMENT LOSS	Maj	Mod	Min	Nil	Symptoms
Flexion					
Extension					
Side gliding R					
Side gliding L					
Other					

TEST MOVEMENTS **Describe effect on present pain – During:** produces, abolishes, increases, decreases, no effect, centralising, peripheralising. **After:** better, worse, no better, no worse, no effect, centralised, peripheralised.

	Symptomatic response		Mechanical response	
	During testing	After testing	Effect - ↑ or ↓ ROM or key functional test	No effect
Pretest symptoms standing _____				
FIS _____				
Rep FIS _____				
EIS _____				
Rep EIS _____				
Pretest symptoms lying _____				
FIL _____				
Rep FIL _____				
EIL _____				
Rep EIL _____				
Pretest symptoms _____				
SGIS - R _____				
Rep SGIS - R _____				
SGIS - L _____				
Rep SGIS - L _____				
Other movements _____				

STATIC TESTS

Sitting slouched / erect / lying prone in extension / long sitting _____

OTHER TESTS _____

PROVISIONAL CLASSIFICATION

Derangement Central or symmetrical Unilateral or asymmetrical above knee Unilateral or asymmetrical below knee

Directional Preference: _____

Dysfunction: Direction _____ **Postural** **OTHER** subgroup: _____

POTENTIAL DRIVERS OF PAIN AND / OR DISABILITY Comorbidities Cognitive - Emotional Contextual

Descriptions: _____

PRINCIPLES OF MANAGEMENT

Education _____

Exercise type _____ Frequency _____

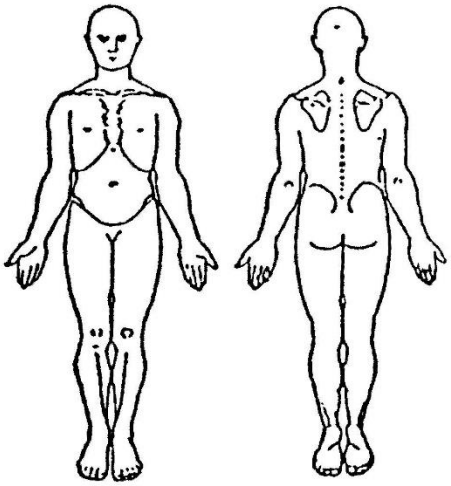
Other exercises / interventions _____

Management goals _____

_____ Signature _____

McKenzie Institute International 2020©

THE McKENZIE INSTITUTE
CERVICAL SPINE ASSESSMENT



Date _____

Name _____ Gender _____

Address _____

Telephone _____

Date of Birth _____ Age _____

Referral: *GP / Orth / Self / Other* _____

Work demands _____

_____

Leisure activities _____

_____

Functional limitation for present episode _____

_____

Outcome / Screening score _____

NPRS (0-10) _____

Present Symptoms _____

Present since _____ *improving / unchanging / worsening*

Commenced as a result of _____ no apparent reason

Symptoms at onset: *neck / arm / forearm / head* _____

Constant symptoms: *neck/arm/forearm/head* _____ Intermittent symptoms: *neck/arm/forearm/head* _____

Worse *bending* *sitting* *turning* *lying / rising*
am / as the day progresses / pm *when still / on the move*
other _____

Better *bending* *sitting* *turning* *lying*
am / as the day progresses / pm *when still / on the move*
other _____

Disturbed Sleep *yes / no* Sleeping postures: *prone / sup / side R / L* Pillows: _____

Previous spinal history _____

_____

Previous treatments _____

_____

SPECIFIC QUESTIONS

Dizziness / tinnitus / nausea / vision / speech _____ Gait / Upper Limbs: *normal / abnormal*

Medications: _____

General health / Comorbidities: _____

_____ Recent / relevant surgery: *yes / no* _____

History of cancer: *yes / no* _____ Unexplained weight loss: *yes / no* _____

History of trauma: *yes / no* _____ Imaging: *yes / no* _____

Patient goals / expectations: _____

_____

McKenzie Institute International 2020©

EXAMINATION

POSTURAL OBSERVATION

Sitting: *erect / neutral / slump* Protruded head: *yes / no* Lateral deviation: *right / left / nil*

Change of posture: *better / worse / no effect* _____ Lateral deviation relevant: *yes / no*

Other observations / functional baselines: _____

NEUROLOGICAL

Motor deficit _____ Reflexes _____

Sensory deficit _____ Neurodynamic tests _____

MOVEMENT LOSS	Maj	Mod	Min	Nil	Symptoms
Protrusion					
Flexion					
Retraction					
Extension					

	Maj	Mod	Min	Nil	Symptoms
Lateral flexion R					
Lateral flexion L					
Rotation R					
Rotation L					

TEST MOVEMENTS **Describe effect on present pain – During:** produces, abolishes, increases, decreases, no effect, centralising, peripheralising. **After:** better, worse, no better, no worse, no effect, centralised, peripheralised.

	Symptomatic response		Mechanical response	
	During testing	After testing	Effect - ↑or ↓ROM or key functional test	No effect
Pretest symptoms sitting				
PRO				
Rep PRO				
RET				
Rep RET				
RET EXT				
Rep RET EXT				
Pretest symptoms lying				
RET				
Rep RET				
RET EXT				
Rep RET EXT				
Pretest symptoms				
LF - R				
Rep LF - R				
LF - L				
Rep LF - L				
ROT - R				
Rep ROT - R				
ROT - L				
Rep ROT - L				
FLEX				
Rep FLEX				
Other movements				

STATIC TESTS Pro / Ret / Flex / Other _____ **OTHER TESTS** _____

PROVISIONAL CLASSIFICATION

Derangement Central or symmetrical Unilateral or asymmetrical above elbow Unilateral or asymmetrical below elbow

Directional Preference: _____

Dysfunction: Direction _____ **Postura**l **OTHER** subgroup: _____

POTENTIAL DRIVERS OF PAIN AND / OR DISABILITY Comorbidities Cognitive - Emotional Contextual

Descriptions: _____

PRINCIPLES OF MANAGEMENT

Education _____

Exercise type _____ Frequency _____

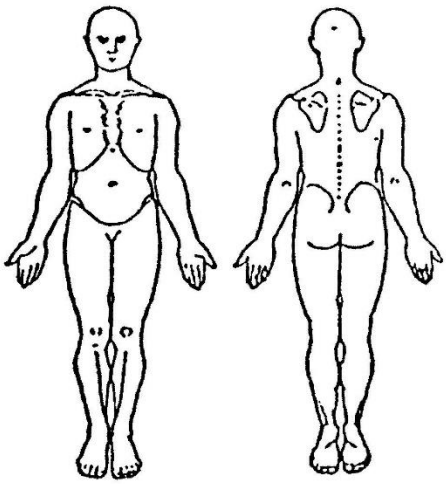
Other exercises / interventions _____

Management goals _____

_____ Signature _____

McKenzie Institute International 2020©

THE McKENZIE INSTITUTE
THORACIC SPINE ASSESSMENT



Date _____

Name _____ Gender _____

Address _____

Telephone _____

Date of Birth _____ Age _____

Referral: *GP / Orth / Self / Other* _____

Work demands _____

_____

Leisure activities _____

_____

Functional limitation for present episode _____

_____

Outcome / Screening score _____

NPRS (0-10) _____

Present symptoms _____

Present since _____ *improving / unchanging / worsening*

Commenced as a result of _____ no apparent reason

Symptoms at onset _____

Constant symptoms _____ Intermittent symptoms _____

Worse *bending* *sitting / rising* *turning neck / trunk* *standing* *lying*
am / as the day progresses / pm *when still / on the move*
other _____

Better *bending* *sitting / rising* *turning neck / trunk* *standing* *lying*
am / as the day progresses / pm *when still / on the move*
other _____

Disturbed sleep *yes / no* Sleeping postures: *prone / sup / side R / L* Pillows: _____

_____

Previous spinal history _____

_____

Previous treatments _____

_____

SPECIFIC QUESTIONS

Cough / sneeze / deep breath _____ Gait / Upper Limbs: *normal / abnormal*

Medications: _____

General health / Comorbidities: _____

_____ Recent / relevant surgery: *yes / no* _____

History of cancer: *yes / no* _____ Unexplained weight loss: *yes / no* _____

History of trauma: *yes / no* _____ Imaging: *yes / no* _____

Patient goals / expectations: _____

_____

McKenzie Institute International 2020©

EXAMINATION

POSTURAL OBSERVATION

Sitting: *erect / neutral / slump* Protruded head: *yes / no* Change of posture: *better / worse / no effect* _____

Standing: *neutral / kyphotic* _____

Other observations / functional baselines: _____

NEUROLOGICAL (upper and lower limb)

Motor deficit _____ Reflexes _____

Sensory deficit _____ Neurodynamic tests _____

MOVEMENT LOSS	Maj	Mod	Min	Nil	Symptoms
Flexion					
Extension					
Rotation R					
Rotation L					
Other					

CERVICAL SPINE REPEATED MOVEMENT TESTING

Rep Pro _____

Rep Ret _____

Rep Ret Ext _____

Rep LF - R _____

Rep LF - L _____

Rep ROT - R _____

Rep ROT - L _____

Rep Flex _____

TEST MOVEMENTS **Describe effect on present pain – During:** produces, abolishes, increases, decreases, no effect, centralising, peripheralising. **After:** better, worse, no better, no worse, no effect, centralised, peripheralised

	Symptomatic response		Mechanical response	
	During testing	After testing	Effect - ↑ or ↓ ROM or key functional test	No effect
Pretest symptoms sitting _____				
FLEX _____				
Rep FLEX _____				
EXT _____				
Rep EXT _____				
Pretest symptoms lying _____				
EIL (prone) _____				
Rep EIL (prone) _____				
EIL (supine) _____				
Rep EIL (supine) _____				
Pretest symptoms sitting _____				
ROT - R _____				
Rep ROT - R _____				
ROT - L _____				
Rep ROT - L _____				
Other movements _____				

STATIC TESTS Flex / Ext / Rotation / Other _____ **OTHER TESTS** _____

PROVISIONAL CLASSIFICATION

Derangement Central or symmetrical Unilateral or asymmetrical

Directional Preference: _____

Dysfunction: Direction _____ **Postural** **OTHER** subgroup: _____

POTENTIAL DRIVERS OF PAIN AND / OR DISABILITY Comorbidities Cognitive - Emotional Contextual

Descriptions: _____

PRINCIPLES OF MANAGEMENT

Education _____

Exercise type _____ Frequency _____

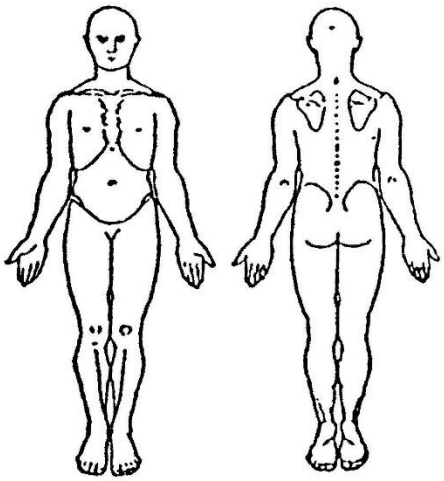
Other exercises / interventions _____

Management goals _____

_____ Signature _____

McKenzie Institute International 2020©

THE McKENZIE INSTITUTE
LOWER EXTREMITIES ASSESSMENT



Date _____

Name _____ Gender _____

Address _____

Telephone _____

Date of Birth _____ Age _____

Referral: *GP / Orth / Self / Other* _____

Work demands _____

_____

Leisure activities _____

_____

Functional limitation for present episode _____

_____

Outcome / Screening score _____

NPRS (0-10) _____

Present symptoms _____

Present since _____ *improving / unchanging / worsening*

Commenced as a result of _____ *no apparent reason*

Symptoms at onset _____ Paraesthesia: yes / no

Spinal history _____ Cough / Sneeze +ve / -ve

Constant symptoms: _____ Intermittent symptoms: _____

Worse *bending sitting / rising / first few steps standing walking stairs squatting / kneeling*
am / as the day progresses / pm when still / on the move Sleeping: *prone / sup / side R / L*
Other _____

Better *bending sitting standing walking stairs squatting / kneeling*
am / as the day progresses / pm when still / on the move Sleeping: *prone / sup / side R / L*
other _____

Continued use makes the pain: *better worse no effect* Disturbed sleep *yes / no*

Pain at rest *yes / no* Site: *back / hip / knee / ankle / foot*

Other Questions: *swelling catching / clicking / locking giving way / falling*

Previous history _____

Previous treatments _____

Medications _____

General health / Comorbidities: _____

_____ Recent / relevant surgery: *yes / no* _____

History of cancer: *yes / no* _____ Unexplained weight loss: *yes / no* _____

History of trauma: *yes / no* _____ Imaging: *yes / no* _____

Patient goals / expectations _____

_____

EXAMINATION

POSTURAL OBSERVATION

Sitting: *lordotic / neutral / kyphotic* Change of posture: *better / worse / no effect* Standing: *lordotic / neutral / kyphotic*

Other observations: _____

NEUROLOGICAL: NA / motor / sensory / reflexes / neurodynamic _____

BASELINES: Pain and functional activity _____

EXTREMITIES *hip / knee / ankle / foot* _____

MOVEMENT LOSS	Maj	Mod	Min	Nil	Symptoms
Flexion					
Extension					
Dorsi Flexion					
Plantar Flexion					
Other:					

	Maj	Mod	Min	Nil	Symptoms
Adduction / Inversion					
Abduction / Eversion					
Internal Rotation					
External Rotation					
Other:					

Passive Movement: note symptoms, range and +/- over pressure: _____

PDM	ERP

Resisted test pain response _____

Other tests / static positioning _____

SPINE

Movement Loss _____

Effect of repeated movements _____

Effect of static positioning _____

Spine testing *not relevant / relevant / secondary problem* _____

Baseline Symptoms _____

Repeated Tests	**Symptomatic Response**		**Mechanical Response**	
Active / Passive movement, resisted test, functional test	**During** Produce, Abolish, Increase, Decrease, NE	**After** Better, Worse, NB, NW, NE	**Effect** ↑ or ↓ ROM, strength or key functional test	No Effect

PROVISIONAL CLASSIFICATION **Extremities** **Spine**

Derangement _____ Directional Preference _____

Dysfunction: Articular / Contractile _____ **Postural** **OTHER** subgroup: _____

POTENTIAL DRIVERS OF PAIN AND / OR DISABILITY Comorbidities Cognitive - Emotional Contextual

Descriptions: _____

PRINCIPLES OF MANAGEMENT

Education _____

Exercise type _____ Frequency _____

Other exercises / interventions _____

Management goals _____

_____ Signature _____

THE McKENZIE INSTITUTE
UPPER EXTREMITIES ASSESSMENT

Date _____

Name _____ Gender _____

Address _____

Telephone _____

Date of Birth _____ Age _____

Referral: *GP / Orth / Self / Other* _____

Work demands _____

_____

Leisure activities _____

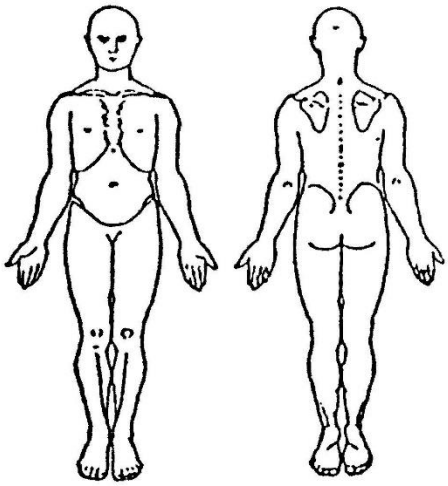
_____

Functional limitation for present episode _____

_____

Outcome / Screening score _____

NPRS (0-10) _____



Handedness: Right / Left

Present symptoms _____

Present since _____ *improving / unchanging / worsening*

Commenced as a result of _____ *no apparent reason*

Symptoms at onset _____ Paraesthesia: yes / no

Spinal history _____ Cough / Sneeze +ve / -ve

Constant symptoms: _____ Intermittent symptoms: _____

Worse *bending sitting turning neck dressing reaching gripping*
am / as the day progresses / pm when still / on the move Sleeping: *prone / sup / side R / L*
Other _____

Better *bending sitting turning neck dressing reaching gripping*
am / as the day progresses / pm when still / on the move Sleeping: *prone / sup / side R / L*
other _____

Continued use makes the pain: *better worse no effect* Disturbed sleep *yes / no*

Pain at rest *yes / no* Site: *neck / shoulder / elbow / wrist / hand*

Other Questions: *swelling catching / clicking / locking subluxing*

Previous history _____

Previous treatments _____

Medications _____

General health / Comorbidities: _____

_____ Recent / relevant surgery: *yes / no* _____

History of cancer: *yes / no* _____ Unexplained weight loss: *yes / no* _____

History of trauma: *yes / no* _____ Imaging: *yes / no* _____

Patient goals / expectations _____

_____

EXAMINATION

POSTURAL OBSERVATION

Sitting: *erect / neutral / slump* Change of posture: *better / worse / no effect* Standing: *lordotic / neutral / kyphotic*

Other observations: _____

NEUROLOGICAL: NA / motor / sensory / reflexes / neurodynamic _____

BASELINES: Pain and functional activity _____

EXTREMITIES *shoulder / elbow / wrist / hand* _____

MOVEMENT LOSS	Maj	Mod	Min	Nil	Symptoms
Flexion					
Extension					
Supination					
Pronation					
Other:					

	Maj	Mod	Min	Nil	Symptoms
Adduction / Ulnar Deviation					
Abduction / Radial Deviation					
Internal Rotation					
External Rotation					
Other:					

Passive Movement: note symptoms, range and +/- over pressure: _____

PDM	ERP

Resisted test pain response _____

Other tests / static positioning _____

SPINE

Movement Loss _____

Effect of repeated movements _____

Effect of static positioning _____

Spine testing *not relevant / relevant / secondary problem* _____

Baseline Symptoms _____

Repeated Tests	**Symptomatic Response**		**Mechanical Response**	
Active / Passive movement, resisted test, functional test	**During** Produce, Abolish, Increase, Decrease, NE	**After** Better, Worse, NB, NW, NE	**Effect** ↑ or ↓ ROM, strength or key functional test	No Effect

PROVISIONAL CLASSIFICATION **Extremities** **Spine**

Derangement _____ Directional Preference _____

Dysfunction: Articular / Contractile _____ **Postural** **OTHER** subgroup: _____

POTENTIAL DRIVERS OF PAIN AND / OR DISABILITY Comorbidities Cognitive - Emotional Contextual

Descriptions: _____

PRINCIPLES OF MANAGEMENT

Education _____

Exercise type _____ Frequency _____

Other exercises / interventions _____

Management goals _____

_____ Signature _____