**Spine Pathway (V14) 03.06.2019**

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| **SELF-CARE AND SELF-MANAGEMENT**  Integrated MSK Service Website: <https://sussexmskpartnershipcentral.co.uk/> |
| **OUTCOME MEASURES**   * MSK-HQ * STarT Back Tool |
| **Part III**  **Low Back Pain**  **Acute back pain <6 weeks**  **Mechanical low back pain**  Acute back pain <6 weeks  **Persistent or chronic low back pain**  **Chronic low back and sacroiliac joint pain**  (back pain lasting for >12 weeks duration)  **Osteoporosis**  **Insufficiency fractures**  **Traumatic**  **Spinal infection**  **Inflammatory back pain**  **Metastatic disease**  **Metastatic spinal cord compression**  **Cauda equina**  **Spondylolisthesis** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **NICE 2016:** The term 'low back pain’ is used to include any non-specific low back pain which is not due to cancer, fracture, infection or an inflammatory disease process.  **NICE 2009:** As defined by NICE in the Low Back Pain Guidelines published “Non-specific low back pain is tension, soreness and/or stiffness in the lower back region for which it is not possible to identify a specific cause of the pain. Several structures in the back, including the joints, discs and connective tissues, may contribute to symptoms”. |
| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Acute back pain <6 weeks** |
| **Primary Care Management** | **Please note:** Many patients will get better within 6-12 weeks. Try to manage them in primary care.   * History * Examination and Assessment * Perform a bio-psychosocial assessment * Consider using StarTBack tool   Consider using risk stratification at first point of contact with a healthcare professional for each new episode of low back pain with or without sciatica to inform shared decision-making about stratified management.  **Investigations:**   * Consider appropriate blood tests * Consider appropriate imaging as indicated (X-Ray, MRI, CT, NM)   **Management (including condition-specific self-care options):**   * First six weeks manage in primary care if investigations are within normal limits * Analgesia in line with agreed formularies / guidance * Consider self-referral to physiotherapy |
| **Thresholds for Primary Care**  **to initiate a referral** | **Manage in primary care** |
| **Management Pathway for the**  **Integrated MSK Service** | **N/A** |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | **N/A** |
| **Management pathway for Specialist In-patient care** | **N/A** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Mechanical low back pain**  **Acute back pain <6 weeks** |
| **Primary Care Management** | **Please note:** Many patients will get better within 6-12 weeks. Try to manage them in primary care.   * History * Examination and Assessment * Perform a bio-psychosocial assessment * Consider using StarTBack tool   Consider using risk stratification at first point of contact with a healthcare professional for each new episode of low back pain with or without sciatica to inform shared decision-making about stratified management.  **Investigations:**   * Consider appropriate blood tests * Consider appropriate imaging as indicated (X-Ray, MRI, CT, NM)   Please note:  X-Ray not available to primary care in Horsham and Crawley  **Management (including condition-specific self-care options):**   * First six weeks manage in primary care if investigations are within normal limits * Analgesia in line with agreed formularies / guidance * Consider self-referral to physiotherapy |
| **Thresholds for Primary Care**  **to initiate a referral** | **Refer to General Physiotherapy**   * Not resolved > 6 weeks management in Primary Care or consider self-referral to physiotherapy   **Refer to Advanced Practitioner (ICATS) if**   * Investigations are outside normal limits * Persistent pain which is not adequately controlled / resolved * Unresponsive to previous conservative management for the current episode * Unclear presentation |
| **Management Pathway for the**  **Integrated MSK Service**  [**Facet Joint Medial Branch Blocks**](https://www.rcoa.ac.uk/sites/default/files/FPM-facet%20jt%20medial%20branch%20block.pdf)  *See Documents – Page 18*  *1. Diagnostic Lumbar Facet Joint Medial Branch Block*  [**Denervation**](https://www.rcoa.ac.uk/sites/default/files/FPM-facet%20joint%20injections.pdf)  *See Documents – Page 18*  *2. Lumbar Radiofrequency Denervation* | **1 Patient information**  **2 Assessment and examination**  **3 Differential diagnosis**   1. Mechanical low back pain 2. Osteoporosis / insufficiency fracture   **See Fracture Liaison Service Pathway**   1. Unclear presentation +± red flags (rule out spinal infection, inflammatory back pain, metastatic disease, metastatic spinal cord compression, stenosis and radiculopathy) 2. Spondylolisthesis 3. Modic changes   **4 Investigations**   * Consider appropriate blood tests * Consider appropriate imaging as indicated (X-Ray, MRI, CT, NM)   **5 Management**   * Analgesia modification * Consider conservative treatment: physiotherapy / osteopathy / chiropractic treatment * Consider referral to pain clinic * Consider lumbar facet joint denervation * Kyphoplasty –AP to discuss with pathway lead until C&H / Mid Sussex LPP has been agreed * Vertebroplasty –AP to discuss with pathway lead until C&H / Mid Sussex LPP has been agreed   [**Facet Joint Medial Branch Blocks**](https://www.rcoa.ac.uk/sites/default/files/FPM-facet%20jt%20medial%20branch%20block.pdf)  [**Denervation**](https://www.rcoa.ac.uk/sites/default/files/FPM-facet%20joint%20injections.pdf)   1. **Outcome tools**  * MSK-HQ |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | * Persistent pain which is not adequately controlled / resolved * Unresponsive to previous conservative management for the current episode * Uncertainty regarding appropriate treatment i.e. injection and/or surgery * Complex presentation   Offer patient choice of provider if patient needs and wants surgery, is fit for surgery and is appropriate surgical candidate. |
| **Management pathway for Specialist In-patient care**  *See Documents – Page 18*  *3. Consent – Anterior Lumbar Surgery*  *4. Consent - Posterior Lumbar Surgery* | **Surgery as appropriate**  For mechanical back pain as per NICE guidance fusion only as part of an RCT  For spondylolisthesis – surgery as per consultants preference.  *See Documents – Page 18*  *5. Lumbar Spine Surgery*  *6. Risks of Spinal Surgery*  *7. Information and Guidance for Patients Following Lumbar Spinal Surgery*  *Please note:*  *This section of the guidelines may need to be reviewed once the CEC guidelines have been published.* |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Persistent or chronic low back pain** |
| **Primary Care Management** | **See Pain Pathway**  Information and advice to support self-management  See link NICE LBP with or without sciatica in over 16 <https://www.nice.org.uk/Guidance/NG59>  **Analgesia**  **Risks and benefits of NSAID’s +/- GI cover**  **Do not offer opiods for persistent LBP** |
| **Thresholds for Primary Care**  **to initiate a referral** | **Refer to Physiotherapy if:**  1) Individualised, specific and collaborative support, guidance and provision of treatment inl. Exercise, manual therapy, psychological therapies as part of a treatment package.  2) Combined physical and psychological programmes (preferably group context) when there are significant psychosocial barriers to recovery or when previous treatments have not been effective  **DO NOT OFFER**   * Acupuncture * Electrotherapy * Traction, foot orthotics, belts or corsets   **Refer to ICATS if:**   * New/additional or uncertain progression of symptoms * Not responding to individual/group therapy * No previous investigations or specialist opinion |
| **Management Pathway for the**  **Integrated MSK Service** | **1 Patient information**  **2 Assessment and examination**  **3 Investigations**   * Consider appropriate blood tests * Consider appropriate investigations MRI, NCS blood tests   **4 Management**   * Analgesia modification * Consider conservative treatment: physiotherapy / osteopathy / chiropractic treatment * Consider referral to pain clinic * Consider lumbar facet joint denervation * Nerve root injection  1. **Outcome tools**  * MSK-HQ   **Pain Management Team**  Combined physical and psychological programmes (preferably group context) when there are significant psychosocial barriers to recovery or when previous treatments have not been effective |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | **Interventional Pain treatment**  **Radiofrequency denervation**  Consider referral for assessment for radiofrequency denervation for people with chronic low back pain when:   * non-surgical treatment has not worked for them **and** * the main source of pain is thought to come from structures supplied by the medial branch nerve **and** * They have moderate or severe levels of localized back pain (rated as 5 or more on a visual analogue scale, or equivalent) at the time of referral.   NICE 2016  **Spinal cord stimulation**  **See link** <https://www.nice.org.uk/guidance/TA159>  currently  **DO NOT OFFER for LBP**  Spinal injections  Disc replacement  Spinal Fusion – unless part of a RCT |
| **Management pathway for Specialist In-patient care** | **N/A** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Chronic low back and sacroiliac joint pain**  **(back pain lasting for >12 weeks duration)** |
| **Primary Care Management** | **Please note:**  Many patients with persistent back pain will experience flare ups. These usually resolve within 6-12 weeks.  **Primary care consultation:**   * History * Examination and Assessment   **Be alert for new symptoms, red flags, and changes to the patient’s normal presentation. Act accordingly.**   * Perform a bio-psychosocial assessment using StarTBack tool: [Keele StarTBack](https://www.keele.ac.uk/sbst/startbacktool/usingandscoring/)   **Investigations:**   * Consider appropriate investigations as indicated   (*In patients with chronic lumbar back pain with no clinical or serological indicators of infection or neoplasia (i.e., no red flags) x-ray is only indicated if presentation suggests osteoporotic collapse in the elderly*)  **Primary care management (including self-care options):**  **General advice**   * Offer reassurance * Consider self-referral to physiotherapy * Consider sign posting to community based physical activity and exercise programmes * Consider sign posting to community based counselling services e.g. time to talk / wellbeing services   **Medication advice**   * Analgesia in line with agreed formularies / guidance * Monitor ongoing risk factors, and prescribe at lowest dose for shortest possible period.   **Do not** offer opioids for managing CLBP  **Do not** offer neuropathic medication for back pain without sciatica  **Do not** offer anticonvulsants for back pain  **Specific management advice** *(discuss options through SDM)*   * Promote maintenance of normal ADL’s * Promote maintenance at / return to work * For patients previously referred to physiotherapy / MSK review agreed flare up plan   *(N.B. Clinicians need to be aware of the importance of the patient’s employment – options for a ‘phased return’ should be explored in each case)*  *(N.B. Patients dealing with disability and loss of employment should be directed specific areas of support e.g. through an occupational health department and specially trained staff)*   * Develop a management plan to aid the patient in understanding what to expect / their role and responsibilities in managing the pain. * Discuss combined physical and psychological programmes for chronic pain when there are psychological barriers to recovery and previous treatments have not been effective |
| **Thresholds for Primary Care**  **to initiate a referral** | **General Physiotherapy**   * Advise self-referral to patients when community support services not appropriate for their needs * Refer to physiotherapy when pain > 6 weeks duration and not improving with primary care management   **DO NOT** recommend acupuncture / TENS for back pain with or without sciatica  Keele Score:   * *Low / medium risk: try to manage in primary care. Consider signposting to MSK website and support services. Consider referral to physiotherapy when duration symptoms > 6 weeks* * *High risk and* ***NO*** *prior conservative management refer to physiotherapy. Consider earlier referral for these patients.*   **Refer to Advanced Practitioner (ICATS) if:**   * Primary care investigations are outside normal limits, or further investigation is indicated (e.g. CT . MRI etc) * Persistent pain which is not adequately controlled / resolved despite mediation review * Unresponsive to previous conservative management for the current episode * Unclear presentation * No benefit from physiotherapy / analgesia * Previously attended pain management programme / back in control class   **Urgent Referral to Advanced Practitioner (ICATS) if**:   * Significantly deteriorating symptoms or spinal abnormality |
| **Management Pathway for the**  **Integrated MSK Service** | **1 Triage of Patient information**   * Patients with a suspicion of metastatic disease to be redirected either on 2WW or to treating oncology consultant if undergoing treatment / monitoring * Referrals requiring investigation with CT / NM to be redirected to secondary care * Redirect scoliosis to secondary care * Redirect to pain pathway if no new symptoms or no further investigations required, and unresponsive to prior conservative management including PMP and BIC   **2 Assessment and examination**  Biopsychosocial assessment, though SDM explore psychosocial factors, patient understanding of psychological interventions, and role in self-management  **3 Differential diagnosis**   * Facet joint pain (median branch) * Mechanical low back pain / modic change * Osteoporosis / insufficiency fracture   + Link to Fracture Liaison Service (see above) * Unclear presentation / red flags (spinal infection, inflammatory back pain, metastatic disease, metastatic spinal cord compression, stenosis and radiculopathy) * Spondylolisthesis   **4 Investigations**   * Consider appropriate blood tests * Consider appropriate imaging as indicated. (*Patients requiring CT / NM Bone scan to be referred to secondary care*)   **5 Management** (through SDM)   * Develop flare up plan. * Consider third party sector support services from Arthritis Care / NRAS / [Expert Patient Programme](https://www.sussexcommunity.nhs.uk/services/servicedetails.htm?directoryID=16306) * Offer local support services where appropriate (time to talk, [right track (possibility people),](https://www.possabilitypeople.org.uk/how-we-can-help/support/right-track-2/) silver cloud etc.) * Consider medication review with GP / pain pathway as appropriate * Onwards referral for other specialty input / review e.g. Substance Misuse * Consider physiotherapy (depending on StarTBack score). Physiotherapy options include: Back reconditioning / back in action * Consider radiofrequency denervation (RDF) / sacroiliac joint injection(*referral criteria next column*)   **DO NOT** offer facet / trigger point injections for back pain   * Explore engagement with self-referral to [Expert Patient Programme](https://www.sussexcommunity.nhs.uk/services/servicedetails.htm?directoryID=16306) as work up to pain pathway referral * Consider referral to pain pathway when no benefit from previous physiotherapy / RDF / high risk StarTBack   **6 Outcome tools**   * StarTBack * MSK-HQ |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | **Pain clinic**  Chronic Back Pain:  Referral for radiofrequency denervation (RFD), consider when;   * Non-surgical treatment not effective * Moderate to severe pain rated >5/10 NPRS * Symptoms from structures supplied by medial branch * or positive response to previous medial branch block / RFD (after 18 months)   *Imaging is not a prerequisite for RFD in cases of chronic back pain*  [Royal College Anaesthetists info for RFD](https://www.rcoa.ac.uk/sites/default/files/FPM-denerv%20rad%20freq.pdf)  **DO NOT** offer facet joint or trigger point injections for back pain  **Offer patient choice of provider: Note direct listing, Nuffield Haywards Heath available to Mid Sussex patients only, Monte Fiore Hove to Brighton patients only**  Chronic Sacroiliac Joint Pain:   * Pain localised to SIJ * +ve SIJ Tests 3/5 * Features not consistent with SPAR * Pain poorly controlled * Not improved with previous conservative treatment   **Referral for surgical opinion**  Do not offer surgery (*inc fusion and disc replacement*) for chronic back pain  NICE guidance advises fusion only to be offered as part of an RCT. |
| **Management pathway for Specialist In-patient care** | **Pain clinic**  RDF only offered in response to positive medial branch block (MBB).  Sacroiliac joint injections  Follow up to be completed by MSK, and when specified by referring clinician |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Osteoporosis** |
| **Primary Care Management** | **See Fracture Liaison Service Pathway** |
| **Thresholds for Primary Care**  **to initiate a referral** | **N/A** |
| **Management Pathway for the**  **Integrated MSK Service** | **N/A** |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | **N/A** |
| **Management pathway for Specialist In-patient care** | **N/A** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Insufficiency fractures** |
| **Primary Care Management** | **See Fracture Liaison Service Pathway** |
| **Thresholds for Primary Care**  **to initiate a referral** | **N/A** |
| **Management Pathway for the**  **Integrated MSK Service** | **N/A** |
| **Thresholds for referral for Intervention**  **Offer patient choice of provider** | **N/A** |
| **Management pathway for Specialist In-patient care** | **N/A** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Traumatic**  Fall, Sport related injury, Direct blow, Sudden acute onset osteoporosis |
| **Primary Care Management** | **Assessment:**   * History * Examination * Working / differential diagnosis   **Diagnostics:**   * X-Ray   **Management (including condition-specific self-care options):**   * **If Osteoporosis see Fracture Liaison Service pathway** * First six weeks manage in primary care if investigations are within normal limits * Analgesia in line with agreed formularies / guidance * Consider self-referral to physiotherapy |
| **Thresholds for Primary Care**  **to initiate a referral** | **Unable to manage in primary care due to continuous pain.** |
| **Management Pathway for the**  **Integrated MSK Service** | **1 Patient information**  **2 Assessment and examination**  **3 Differential diagnosis**   * Crush fracture due to trauma * Unclear presentation ± red flags (rule out spinal infection, metastatic disease, metastatic spinal cord compression)   **4 Investigations**   * Consider appropriate blood tests * Consider appropriate imaging as indicated (X-Ray, MRI, CT, NM)   **5 Management**   * Analgesia modification * Physiotherapy * Consider nerve blocks * Consider lumbar facet joint denervation * Kyphoplasty –AP to discuss with pathway lead until C&H / Mid Sussex CEC has been agreed * Vertebroplasty –AP to discuss with pathway lead until C&H / Mid Sussex CEC has been agreed  1. **Outcome tools**  * MSK-HQ |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | Offer patient choice of provider if patient needs and wants kyphoplasty or vertebroplasty, is fit for this procedure and appropriate candidate. |
| **Management pathway for Specialist In-patient care** | **Surgical preference**  *See Documents – Pages 18 - 19*  *8. Consent – Vertebroplasty and Kyphoplasty* |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Spinal infection**  Spinal infection should not be referred through to SMSKP |
| **Primary Care Management** | * History * Examination and Assessment * Consider heel toe walk   **Investigations:**   * Consider appropriate blood tests * Consider appropriate imaging as indicated (X-Ray, MRI, CT, NM)   **Management (including condition-specific self-care options):**   * Explanation of cause * None |
| **Thresholds for Primary Care**  **to initiate a referral** | **Urgent referral to A&E**  **DO NOT send to SMSKP** |
| **Management Pathway for the**  **Integrated MSK Service** | **Spinal infection should not be referred through to SMSKP. Should this happen:**   * Urgent referral to A&E OR * Further urgent investigations OR * Urgent referral to secondary care   **At triage:**  **Urgent referral to A&E**: If suspected spinal infection within the referral letter- call the patient to clarify the symptoms and if spinal infection is suspected, advise patient to attend A&E, email letter to patient and fax letter to A&E, inform GP. Admin will follow up with a phone call and send letter to GP.  Or **further investigate** as appropriate, or **refer to secondary care.**  **In clinic:**  **Urgent referral to A&E** Advise patient to attend A&E and give letter to patient to take to A&E, inform A&E that patient is going to attend, inform GP and admin to send letter to GP.  Or **further investigate** as appropriate, or **refer to secondary care.**  **From diagnostics:**  **Urgent referral to A&E**: Evidence of spinal infection on scan, check SystmOne for symptoms and signs, call patient. If the patient presents with signs and symptoms of spinal infection, AP to advise patient to attend A&E, admin to send letter and images to relevant hospital, AP to document on SystmOne and notify referring clinician, notify GP, admin to send letter to GP.  Or **further investigate** as appropriate, or **refer to secondary care.** |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | **N/A** |
| **Management pathway for Specialist In-patient care** | **Surgical preference**  **Spinal decompression surgery** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Inflammatory back pain** |
| **Primary Care Management** | **See Rheumatology Pathway** |
| **Thresholds for Primary Care**  **to initiate a referral** | **N/A** |
| **Management Pathway for the**  **Integrated MSK Service** | **N/A** |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | **N/A** |
| **Management pathway for Specialist In-patient care** | **N/A** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Metastatic disease** |
| **Primary Care Management** | *See Documents – Page 18*  *9. SMSKP Serious Pathology Pathways* |
| **Thresholds for Primary Care**  **to initiate a referral** | **N/A** |
| **Management Pathway for the**  **Integrated MSK Service** | **N/A** |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | **N/A** |
| **Management pathway for Specialist In-patient care** | **N/A** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Metastatic spinal cord compression** |
| **Primary Care Management** | *See Documents – Page 18*  *9. SMSKP Serious Pathology Pathways* |
| **Thresholds for Primary Care**  **to initiate a referral** | **N/A** |
| **Management Pathway for the**  **Integrated MSK Service** | **N/A** |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | **N/A** |
| **Management pathway for Specialist In-patient care** | **N/A** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Cauda equina** |
| **Primary Care Management** | *See Spine Guidelines Part I* |
| **Thresholds for Primary Care**  **to initiate a referral** | **N/A** |
| **Management Pathway for the**  **Integrated MSK Service** | **N/A** |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | **N/A** |
| **Management pathway for Specialist In-patient care** | **N/A** |

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| **Referral reason /**  **Patient presentation** | **LOW BACK PAIN**  **Spondylolisthesis** |
| **Primary Care Management** | * History * Examination and Assessment * Perform a bio-psychosocial assessment   Consider using risk stratification at first point of contact with a healthcare professional for each new episode of low back pain with or without sciatica to inform shared decision-making about stratified management.  **Investigations:**   * Consider X-Ray however investigation of choice is MRI   Can be bone stress injury so might not show in X-Ray  Be aware of exposure to radiation  **Management (including condition-specific self-care options):**   * First six weeks manage in primary care * Analgesia in line with agreed formularies / guidance * Consider self-referral to physiotherapy   Bone stress injury (16-18 yo): avoid sport activities  Isthmic spondylolisthesis represents a pars interarticularis fracture usually associated with repetitive forced hyperextension and rotation. It has a higher incidence during the adolescent growth spurt due to incomplete bone maturation of the neural arch and repetitive stress.     * MRI is the primary investigation of choice * Bone scan with SPECT is superior to MRI in the detection of spondylolisthesis and should be consider a second line of investigation * Staging of fracture via CT showing a chronic lesion is unlikely to heal but this doesn’t effect outcome * Acute lesion have the potential to heal with a minimal time interval for healing of 3-4 months based on serial MRI and CT studies * Chronic pars lesions without neurology should be treated symptomatically for a period of 4-6 months. Bracing (e.g. with corset) acute pars lesion does not improve the clinical outcome. * Surgery should be considered in patients with high athletic demands who have failed a comprehensive treatment course of at least 6 months or for those immature athletes with high-grade slips. * Refer for surgical opinion when neurological features are present or there is a high grade slip |
| **Thresholds for Primary Care**  **to initiate a referral** | **Refer to General Physiotherapy**   * if not resolved > 6 weeks management in Primary Care or consider self-referral to physiotherapy   **Refer to Advanced Practitioner (ICATS)**   * If investigations are outside normal limits * Persistent pain which is not adequately controlled / resolved * Unresponsive to previous conservative management for the current episode * Unclear presentation |
| **Management Pathway for the**  **Integrated MSK Service** | **1 Patient information**  **2 Assessment and examination**  **3 Investigations**   * Consider appropriate blood tests * Consider appropriate imaging as indicated (X-Ray, MRI, CT, NM)   **4 Management**   * Analgesia modification * Consider conservative treatment: physiotherapy / osteopathy / chiropractic treatment * Consider referral to pain clinic * Consider lumbar facet joint denervation * Nerve root injection  1. **Outcome tools**  * MSK-HQ   High grades 3-4: Urgent referral to spinal surgery  Progression: If X-Ray shows grade 3 or 4 spondylolisthesis please refer urgently to spinal surgery.  Potentially progression could result in cord / CES compression |
| **Thresholds for referral for Intervention**  Offer patient choice of provider | * Persistent pain which is not adequately controlled / resolved * Unresponsive to previous conservative management for the current episode * Uncertainty regarding appropriate treatment i.e. injection and/or surgery * Complex presentation   Offer patient choice of provider if patient needs and wants surgery, is fit for surgery and is appropriate surgical candidate. |
| **Management pathway for Specialist In-patient care** | **Surgery as appropriate**  Spondylolisthesis surgery  Add risks and benefits + leaflet  *See Documents – Page 18*  *3. Consent – Anterior Lumbar Surgery*  *4. Consent - Posterior Lumbar Surgery*  *5. Lumbar Spine Surgery*  *6. Risks of Spinal Surgery*  *7. Information and Guidance for Patients Following Lumbar Spinal Surgery* |

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| **Documents** | *1. Diagnostic Lumbar Facet Joint Medial Branch Block*    *2. Lumbar Radiofrequency Denervation*    *3. Consent – Anterior Lumbar Surgery*    *4. Consent - Posterior Lumbar Surgery*    *5. Lumbar Spine Surgery*  [*https://sussexmskpartnershipcentral.co.uk/wp-content/uploads/2019/11/Lumbar-Spine-surgery-BSUH-3.pdf*](https://sussexmskpartnershipcentral.co.uk/wp-content/uploads/2019/11/Lumbar-Spine-surgery-BSUH-3.pdf)  *6. Risks of Spinal Surgery*    *7.Information and Guidance for Patients Following Lumbar Spinal Surgery*  [*https://sussexmskpartnershipcentral.co.uk/wp-content/uploads/2019/11/Information-and-Guidance-for-Patients-Following-Lumbar-Spinal-Surgery-BSUH.pdf*](https://sussexmskpartnershipcentral.co.uk/wp-content/uploads/2019/11/Information-and-Guidance-for-Patients-Following-Lumbar-Spinal-Surgery-BSUH.pdf)  *8. Consent – Vertebroplasty and Kyphoplasty*    *9.Serious Pathology Pathways*  [*https://sussexmskpartnershipcentral.co.uk/wp-content/uploads/2019/11/SMSKP-Serious-Pathology-Pathways.pdf*](https://sussexmskpartnershipcentral.co.uk/wp-content/uploads/2019/11/SMSKP-Serious-Pathology-Pathways.pdf) |

**Spine Pathway group 4th December 2013**

Dr Peter Devlin (GP, BICS)

Kieran Barnard (ESP Physiotherapist, SCT / BICS)

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Jonathan Hearsey (ESP Osteopath, BICS)

Johan Holte (Consultant Physiotherapist, BICS)

Ian Francis (Consultant Radiologist, MIP)

Zoe Hall (Physiotherapist, SCT)

Robert Slater (Orthopaedic Consultant, MTW)

Carol Kinsella (Clinical Manager, MTW)

Matthew Daly (ESP Physiotherapist, ESHT)

**Spine Pathway group 5th August 2014**

Dr Peter Devlin (GP, BICS)

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Kasia Kaczmarek (Integrated Care Manager, BICS)

Natalie Blunt (Service Manager, BICS)

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Stephen Daly (ESP, Horder Healthcare)

Matthew Carr (MSK Operations Manager, Horder Healthcare)

Simon Thorpe (Consultant in anaesthetics and Pain Medicine, BSUH)

Steven Ward (Consultant in anaesthetics and Pain Medicine, BSUH)

Di Finney (Rheumatology Consultant Nurse, BICS / SCT)

Karen Eastman (Clinical Director, NSH Horsham & Mid Sussex CCG)

Richard Bell (Service Manager, SCT)

Laura Finucane (Consultant Physiotherapist, SCT)

Zoe Hall (Physiotherapist, SCT)

Farid Ibrahim (Consultant in anaesthetics and Pain Medicine, BSUH)

Hugh Maurice (Orthopaedic Consultant, SASH)

**Spine Pathway group 5th September 2018**

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Sean Case (Advanced Practitioner, HERE)

Karen Cox (Advanced Practitioner Nurse, HERE)

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Andrew Kemp (Advanced Practitioner, HERE)

Andy Laing (Advanced Practitioner, BSUH)

Lisa Marshall (Advanced Practitioner, HERE)

Hilary O’Connor (Advanced Practitioner, HERE)

Gillian Pink (Advanced Practitioner, HERE)

Matthew Prout (Advanced Practitioner, HERE)

Elaine Sawyer (Advanced Practitioner, SCFT)

Toby Smith (Advanced Practitioner, SCFT)

David Stanley (Advanced Practitioner, SCFT)

Claire Wright (Advanced Practitioner, SCFT)

**Spine Pathway group 2nd November 2018**

Johan Holte (Consultant Physiotherapist, HERE)

Sean Case (Advanced Practitioner, HERE)

Karen Cox (Advanced Practitioner Nurse, HERE)

Gareth Florida-Jones (Advanced Practitioner, SCFT)

Zoe Hall (Advanced Practitioner, SCFT)

Ben Hodgson (Advanced Practitioner, HERE)

Andrew Kemp (Advanced Practitioner, HERE)

Olly Peck (Advanced Practitioner, SCFT)

Owen Rist (Osteopath, Here)

Toby Smith (Advanced Practitioner, SCFT)

Ram Vundavalli (Neuro-radiologist, MIP)