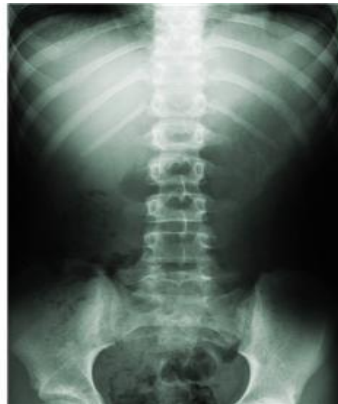
St George's University Hospitals NHS
NHS Foundation Trust

The South West London Metastatic Spinal Cord Compression (MSCC) Service

Standard Operating Procedure



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Incorporating:

South West London Hospitals: St George's University Hospitals NHS Foundation Trust, Royal Marsden NHS Foundation Trust, Epsom and St Helier University Hospitals NHS Trust, Croydon University NHS Trust, Kingston NHS Foundation Trust

St Luke's Cancer Alliance, Royal Surrey County NHS Foundation Trust, Ashford and St Peter's NHS Trust, Frimley Park NHS Foundation Trust and Surrey and Sussex Healthcare NHS Trust.

Surrey West Sussex and Hampshire
Cancer Network

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the South West London Hospitals and SWSHCN	

1. Aims and Functions of the South West London MSCC Service

1.1 Definition of MSCC

Metastatic spinal cord compression (MSCC) is defined in this guideline as spinal cord or cauda equina compression by direct pressure and/or induction of vertebral collapse or instability by metastatic spread or direct extension of malignancy that threatens or causes neurological disability (DoH, 2008)

1.2 Incidence

Evidence from an audit carried out in Scotland between 1997 and 1999[1] and from a published study from Canada[2], suggests that the incidence may be up to 80 cases per million people every year. This equates to approximately 4000 cases each year in England and Wales, or more than 100 cases per cancer Network each year. These figures are set to rise as treatments evolve and survival increases.

MSCC can occur in virtually all types of malignancy, but myeloma, lung, prostate and breast cancer are the commonest.[3]

Tumour Site	Proportion of Patients Who Develop MSCC
Lung	20 - 31%
Prostate	18 - 21%
Breast	13 - 17%
Haematology	8 – 10%
Gastrointestinal	5 - 13%
Kidney	3 - 12%
Unknown	4 - 7%
Other	7 - 14%

The majority of MSCC cases occur in patients with a pre-existing cancer diagnosis, however in around 20% of patients it is their first cancer presentation.

Work was initially carried out within the Network Acute Oncology Group (NAOG) to produce documentation that can be given to patients at risk of MSCC. This work has been subsumed into the London Cancer Alliance (LCA) Acute Oncology Pathway Group for further development. The purpose of this documentation is to raise awareness of symptoms and to provide the patient with comprehensive instructions to facilitate effective management.
An example of the alert card and information leaflet can be found in **Appendix 1** (**please note** that the information leaflet presently displays the SWLCN logo rather than the new LCA logo. We are in the process of re-branding and reprinting this leaflet for use once existing stocks have been exhausted. The content of this leaflet has been clinically reviewed as part of this review process).

[1] Levack P et al (2001) A prospective audit of the diagnosis, management and outcome of malignant cord compression (CRAG 97/08). Edinburgh: CRAG.
[2] Loblaw DA, Laperriere NJ, Mackillop WJ (2003) A population-based study of malignant spinal cord compression in Ontario. Clinical Oncology 15 (4): 211–17.
[3] Levack P et al (2002) Scottish Cord Compression Study Group. Don't wait for a sensory level--listen to the symptoms: a prospective audit of the delays in diagnosis of malignant cord compression. Clin Oncol (R Coll Radiol). Dec;14(6):472-80

1.3 Service configuration

The London Cancer Alliance (LCA) was established in 2011 as the integrated cancer system across West and South London. They work collaboratively with 17 NHS provider organisations, including two academic health science centres, and the voluntary sector, to deliver safe and effective care, improve cancer clinical outcomes and enhance patients' and carers' experience and quality of care.

The LCA Acute Oncology Pathway Group leads collaborative working for MSCC. MSCC services that sit within the LCA are

- The South West London MSCC Service
- Kings Healthcare Partners
- Imperial College Healthcare NHS Trust

Collaborative working for MSCC is driven by an MSCC subgroup of the LCA Acute Oncology Pathway Group which includes the clinical lead and MSCC coordinator from each service.

1.4 Service Users

Appendix 2 outlines the entire patient pathway and incorporates three access pathways.

The South West London MSCC Service is designed to facilitate urgent management for patients on Pathway One or for patients who progress from Pathway Two to Pathway One (**Appendix 2**).

The patient groups that **should** be managed by this service are as follows:

- Adults with metastatic spinal disease at risk of developing metastatic spinal cord compression.
- Adults with suspected and diagnosed spinal cord and nerve root compression due to metastatic malignant disease.
- Adults with primary malignant tumours (for example, lung cancer, mesothelioma or plasmacytoma) and direct infiltration that threatens spinal cord function.

N.B. Patients with an established diagnosis of **multiple myeloma** may require complex medical management. For this group of patients, the South West London MSCC service will facilitate an initial discussion between the Senior Clinical Advisors for surgery and oncology and the Consultant Haematologist responsible for the management of the patient. This discussion **must** take place prior to any clinical decision making.

The patient groups who **should not** be managed by this service are as follows:

- Adults with spinal cord compression due to primary tumours of the spinal cord and meninges.
- Adults with spinal cord compression due to non-malignant causes.
- Adults with nerve root tumours compressing the spinal cord.
- Children.

These patient groups should be managed as per the established treatment protocols within their specific clinical area.

1.5 Aims and Functions of the South West London MSCC Service

The aims and functions of the South West London MSCC Service reflect the recommendations made within the Acute Oncology Measures (DoH, 2011) to ensure that patients with MSCC receive timely and effective investigation and treatment. This is imperative, as untimely and ineffective management of this oncological emergency can lead to permanent disability and loss of function which in turn leads to a poor performance status and quality of life.

The overall aim of the service is to provide a specialist advisory service **24 hours a day**, **7 days a week** for clinicians and MSCC Co-ordinators within secondary care.

The agreed MSCC Service for South West London Hospitals and St Luke's Cancer Alliance is based at St George's University Hospitals NHS Foundation Trust

All spinal surgery for patients with MSCC **must** be performed at St Georges University Hospitals NHS Foundation Trust as agreed by the LCA Acute Oncology Pathway Group.

The Trust's that are served by the South West London MSCC service are:

South West London Hospitals

The Royal Marsden NHS Foundation Trust (Cancer Centre)

St George's University Hospitals NHS Foundation Trust

Epsom and St Helier University Hospital NHS Trust

Croydon University Hospital

Kingston NHS Foundation Trust

St Luke's Cancer Alliance

The Royal Surrey County NHS Foundation Trust (Cancer Centre)

Surrey and Sussex Healthcare NHS Trust

Frimley Park Hospital NHS Foundation Trust

Ashford and St Peter's NHS Trust

The function of the Network MSCC Service is to facilitate:

- Early detection
- Effective communication
- The production and distribution of accurate and useful information for patients and healthcare professionals
- Specialist interpretation of all related imaging
- Timely treatment

- Early identification of rehabilitation and /or palliative care patient needs
- Auditable results
- Ongoing education

2. Overview of the South West London MSCC Service Team Members

The Senior Clinical Advisors for the South West London MSCC Service have representation from three disciplines: surgery, neuro-radiology and oncology. These are outlined below. The Senior Clinical Advisors are supported by the Lead MSCC Coordinator.

2.1: Senior Clinical Advisors - Surgical

The South West London MSCC Service at St George's Hospital comprises of a rota of the following senior clinical advisors who are spinal specialist within their field:

- **Mr Matthew Crocker –** Consultant Neurosurgeon, Clinical Lead for MSCC
- **Mr Pawan Minhas** – Consultant Neurosurgeon
- **Mr Marios Papadopoulos** – Consultant Neurosurgeon
- **Mr Francis Johnston** – Consultant Neurosurgeon
- **Mr James Laban,** Consultant Neurosurgeon
- **Mr George Eralil,** Locum Consultant Neurosurgeon
- **Mr Jason Bernard** - Consultant Orthopaedic Surgeon
- **Mr Tim Bishop** – Consultant Orthopaedic Surgeon
- **Mr Jim Sale** – Locum Consultant Orthopaedic Surgeon

These Consultants with the support of the three other consultant neurosurgeons will jointly provide an advisory on call rota 24 hours a day and 7 days a week to provide rapid surgical assessment and advice on interventional management. Please see **Referral Flowchart (Appendix 3)** for clear guidance.

During **office hours**, a dedicated Spinal Consultant will review the patient's scans in person, and utilise the clinical information supplied on the MSCC Referral Form to make an immediate clinical decision. This clinical decision will be communicated back to the referrer immediately via the Lead MSCC Co-ordinator.

Out of hours, the on-call Neurosurgical Registrar will initially review the scans and discuss them with the Neurosurgery Consultant on call, utilising the clinical information supplied on the MSCC Referral Form, to allow an immediate clinical decision to be made. This decision will be communicated back to the referrer by the on-call Neurosurgical Registrar.

Overnight an advisory service will be provided and a final clinical decision will be made and communicated back to the referrer after discussion of the case within the morning neurosurgical clinical meeting. Emergency surgery will be offered/performed overnight as clinically indicated by the on call neurosurgery service.

If the patient **is** to have surgical intervention, the Lead MSCC Co-ordinator /on-call Neurosurgical Registrar will provide the referrer with the information required to facilitate urgent transfer of the patient to St George's Hospital **(refer to Section 7.2)**.

If the patient **is not** for surgical intervention, it is then the referrer's responsibility to liaise directly and immediately with the Cancer Centre to arrange urgent radiotherapy **(refer to Section 7.3)**.

N: B: The referrer is expected to send the patients scans and e-mail the referral form to both the South West London MSCC Centre and the local Cancer Centre. They are also responsible for letting the centres know how this data transfer has taken place. This allows the patient to be pre-registered at the cancer centre to streamline radiotherapy planning if required.

The outcome of this process will be summarised and faxed/e-mailed to the Acute Oncology Service (AOS) Administrator in the respective Cancer Centre (RMH NHS FT and RSCH – St Luke's Cancer centre) by the local MSCC Service Administrator. The AOS Administrator will be responsible for cascading that information back to the AOS Service from the referring Trust for audit purposes.

2.2: Senior Clinical Advisors - Neuro-Radiology

The Neuroscience Department at St George's Hospital provides a 24 hour, 7 days a week on call Consultant Neuro-Radiologist rota to support the acute workload within the unit. Therefore, the South West London MSCC Service will have access to a Consultant Neuro-Radiologist at all times.

2.3: Senior Clinical Advisors – Clinical Oncology

This is provided by the respective cancer centres:

- For South West London Hospitals support is provided by the **Royal Marsden NHS Foundation Trust**
    - **MSCC clinical lead: Dr Katharine Aitken, Consultant Clinical Oncologist**
- For SLCA network support is provided by the **Royal Surrey County NHS Foundation Trust**
    - **MSCC clinical lead: Dr May Teoh, Consultant Clinical Oncologist**

A Clinical Oncology SpR will be available to discuss any new case 24 hours a day, 7 days a week and will be able to view IEP/PACS images.
The SpR is supported by the relevant Consultant clinical oncology on call rota as required. Please see **Referral Flowchart (Appendix 3)** for clear guidance.

2.4: Lead MSCC Co-ordinator

The role of the Lead MSCC Co-ordinator is as follows:

- To co-ordinate care for patients who present with actual or potential MSCC and who require access to the specialist supra-regional spinal oncology service

- To provide detailed information to the referrers on referral criteria

- To triage referrals, liaising with referrer, SCA & patient\carers ensuring prompt and effective patient management

- To act as a co-coordinator of the pathway, facilitating multidisciplinary working across healthcare sectors, and organisational boundaries for the supra- regional service

- To demonstrate sound knowledge of the principles of spinal oncology care ensuring optimum standards for patients

- To be based within the specialist trust and liaise with acute and primary care trusts and other organisations across the region to ensure prompt and efficient referrals to the service

- To provide a resource for advice and support across the network

Office hours: The role of the Lead MSCC Co-ordinator will be fulfilled from a rota comprising of the following senior clinical staff:

- Pam Floyd – Spinal Clinical Nurse Specialist and MSCC Co-ordinator

- Moey Chen Lim – Trauma and Orthopaedic Nurse Practitioner (Spinal) (mutual cover)

They will carry the Lead MSCC Co-ordinator bleep **(Bleep 6027)**

Out of hours: The role of the Lead MSCC Co-ordinator will be fulfilled by the Neurosurgical Registrar on call. They will carry the on call neurosurgery bleep **(Bleep 7242)**

Please see **Referral Flowchart (Appendix 3)** for clear guidance.

2.4.1: Training for Lead MSCC Co-ordinator

The SWLCN Acute Oncology Group (NAOG) initially agreed that the Network MSCC Co-ordinator must having the following experience and training to achieve effective service delivery. This work is being taken forward by the LCA.

- Minimum of two years acute clinical experience within oncology, neurosurgery or spinal orthopaedics

- Senior healthcare professional (Band 6 or above)

- Educated to or working towards degree level

- Evidence of ongoing specific training within relevant speciality

Competency assessment was initially carried out at the launch of the service and assessments will be carried out annually as follows:

Pam Floyd - to be assessed for competency by **Mr Matthew Crocker**

Moey Chen Lim – to be assessed for competency by **Mr Jason Bernard**

Competencies may be amended and updated to reflect changes within the service or clinical management strategy.

3. Clinical Triggers

The South West London MSCC Service relates to patients with either a prior diagnosis of cancer or an unknown primary cancer with symptoms suggestive of spinal metastases/metastatic spinal cord compression who present with:

- Pain in the middle (thoracic) or upper (cervical) spine
- Progressive lower (lumbar) spinal pain
- Severe unremitting lower spinal pain
- Spinal pain aggravated by straining (for example, at stool, or when coughing or sneezing)
- Localised spinal tenderness
- Nocturnal spinal pain preventing sleep
- Radicular pain
- Any limb weakness, difficulty in walking
- Sensory loss or bladder or bowel dysfunction
- Neurological signs of spinal cord or cauda equina compression

A patient with a cancer diagnosis and confirmed vertebral metastases is at high risk of developing MSCC. It is important that the patient is educated about the risks of developing MSCC, how to identify these symptoms, what to do and who to contact. (See **Appendix 1** for alert card and patient information leaflet)

4. Referral Pathways (in correlation with the Patient Pathway)

There are three possible pathways within the entire patient pathway which are outlined in **Appendix 2**.

4.1 Pathway One

This pathway relates to patients who present with symptoms suggestive of spinal metastases with neurological symptoms or signs suggestive of MSCC.

A Referral Flowchart has been created to streamline referral. This can be found in **Appendix 3**.

Contact must be made with the Lead MSCC Co-ordinator within **24 hours or less.**

4.2 Pathway Two

This pathway relates to patients who present with symptoms suggestive of spinal metastases without new neurological symptoms. These patients must undergo an MRI scan within 7 days.

Contact must be made with the **Local** MSCC Co-ordinator (who will be the lead for the Acute Oncology Service (AOS) for the Trust) within 24 hours of the scan. If neurological compression is identified they must be immediately placed on Pathway One.

4.3 Pathway Three

This pathway relates to patients who present with non specific spinal pain. These patients should be managed locally through standard back care protocols. This falls outside the remit of the AOS Measures and it is not appropriate for these patients to be managed through the South West London MSCC Service. However, the patient should be closely observed for signs of symptom progression, and if symptoms persist or progress then they should be referred to the South west London MSCC Service via either Pathway One or Pathway Two as appropriate.

5. <u>Contact details for associated MSCC Co-ordinators</u>

The contact numbers for all Local MSCC Co-ordinators (AOS Leads) within the South West London Hospitals and SLCA are outlined within **Appendix 4**. It is essential that good communication links are established to ensure prompt and effective patient management.

6. <u>Referral Process</u>

The local Acute Oncology Service must be contacted in the following cases (see **Appendix4** for contact details**)**

- All patients with symptoms suggestive of spinal metastases with neurological symptoms
- Signs suggestive of MSCC
- Primary imaging suggestive of MSCC

The referral process relates to patients being referred into the South West London MSCC Service via **Pathway One** (see **Appendix 3** for Referral flowchart).

6.1 Recommended Imaging:

All Trusts using the South West London MSCC Service must have access to the Information Exchange Portal (IEP) or allow the Senior Clinical Advisors unlimited (including remote) access to the individual Trust's PACS. Scans should be **simultaneously** sent via IEP to the South West London MSCC Service and to the Cancer Centre (The Royal Marsden Hospital for South West London Hospitals and the Royal Surrey County Hospital if the patient sits within SLCA). The purpose of this is to speed up the ongoing commencement of radiotherapy if surgery is not an option.

Patients presenting with a known malignancy and suspected spinal cord/cauda equina compression should undergo whole spine imaging. MRI is the **preferred** modality. Protocols may be varied according to local practice and patient tolerance but if at all possible should include a minimum of whole spine sagittal T1 and T2-weighted sequences with STIR sequences if time allows. Axial scans should be done through any levels of spinal cord/cauda equina compression. Contrast enhanced scans are not usually necessary unless unenhanced scans suggest metastases within the spinal cord itself or spinal infection is suspected.

If MRI is unavailable on site or contraindicated, CT should used to diagnose or rule out compression of the spinal cord or cauda equina (Crocker et al. Clinical Radiology 2011). Reformatted images in axial, sagittal and coronal planes presented on soft tissue and bone window settings from a routine protocol cancer staging body CT scan are sufficient.

If MSCC is demonstrated on the MRI or CT scan the South West London MSCC Service should be contacted immediately (<24hours).

If CT is done rather than MRI and MSCC is not seen, the patient should be assessed locally and an MRI scan performed within 7 days. The Local MSCC Co-ordinator (AOS Lead) should be contacted (< 24 hours) following the scan. During this time their neurological function should be **closely** monitored and further deterioration **should** prompt immediate discussion with the South West London MSCC Service for reconsideration of transfer.

6.2 Imaging provision with the South West London MSCC Service:

As a minimum requirement, all Trusts within the South West London MSCC Service are able to provide an MRI within 24 hours during the hours of 9am to 5pm Monday to Friday for patients with suspected MSCC and demonstrating clinical signs. This in essence, provides cover for patients presenting between 10am Sunday to 5pm Friday. Between the hours of 8am and 5pm Monday – Friday, the point of contact for imaging at local level will be the radiology consultant covering MRI. The ongoing discussions at the LCA AOS Pathway MSCC Sub-Group indicate that the referral will come via the local MSCC Co-coordinator within the referring unit or via the GP if the patient is being cared for within the primary care setting.

Only one department in the South West London MSCC Service currently offers an on call MRI service, although many departments offer booked out patient lists on at least one day of the weekend. We aim to minimise unnecessary movement of patients between Trusts, particularly when the patients are clinically unstable or in pain. As a result the minimum standard agreed by the LCA AOS Pathway Group includes the provision of a CT scan, contrast enhanced if necessary, within 24 hours.

If an MRI scan is possible during the weekend period, this is optimal. We encourage the development of this service where possible, in compliance with the imaging aspects of the Acute Oncology Measures (DoH, 2011).

6.3 South West London MSCC Service Referral Form

Referring clinicians/local MSCC Co-ordinators will be signposted by the Lead MSCC Co-ordinator/On-call Neurosurgical Registrar to access the South West London MSCC Service Referral Form.

This form can be found at

http://www.stgeorges.nhs.uk/docs/hcp/neuro_mscc.doc

This form must be completed electronically and returned to the South West London MSCC Service. The fully completed form should then be e-mailed to:

Stgh-tr.mscc@nhs.net.

A copy of the form can be found in **Appendix 5**.

A copy of the form should also be sent to the Cancer Centre at the same time to provide patient details to allow the Clinical Oncologist to initiate emergency radiotherapy if/once surgery has been excluded.

Royal Marsden Hospital - **rmh-tr.MSCC@nhs.net**

Royal Surrey County Hospital - **rsc-tr.MSCC@nhs.net**
Please contact the Lead MSCC coordinator and the Clinical Oncologist (or AOS administrator at the local Trust) to confirm how the form has been sent (i.e. e-mail)

These email addresses/faxes are only accessed only Monday to Friday between 0900hr – 1700hrs. Out of hours direct contact should be made with the

neurosurgical SpR on call (via St George's switchboard bleep 7242 and the on-call clinical oncology SpR via switchboard at SLCA or RMH.

6.4 Case Discussion

Every referral must be discussed with the Lead MSCC Co-ordinator/Neurosurgical Registrar on call at St Georges Hospital on 0208 672 1255, bleep 6027 and the on call Clinical Oncologist at the relevant cancer centre via switchboard. This provides an alert that the patient may require urgent radiotherapy if surgery is not appropriate and allow the patient to be registered to facilitate timely planning.

The Lead MSCC Co-ordinator will facilitate the review of imaging and appropriate case discussion. Definitive treatment decisions are made according to the patients overall disease burden (including prognosis), neurological state and rate of neurological deterioration.

If surgery is not indicated then an **immediate follow-up discussion** should take place between the referrer and the Clinical Oncologist on call at the Cancer Centre to arrange urgent radiotherapy. In cases where the overall disease burden is high and the prognosis is poor the immediate discussion will be co-ordinated with the Clinical Oncology Senior Clinical Advisor.

In complex cases a three way discussion with all Senior Clinical Advisors may need to occur before a definitive treatment decision is made.

Patients with an established diagnosis of **multiple myeloma** may require complex medical management. For this group of patients, the South West London MSCC Service will facilitate an initial discussion between the Senior Clinical Advisors for surgery and oncology and the Consultant Haematologist responsible for the management of the patient. This discussion **must** take place prior to any clinical decision making.

7. Definitive Treatment

Definitive treatment will be agreed when the South West London MSCC Service has received the scans and the referral form for the patient.

N.B. It is essential that the referrer assesses and records an accurate and up to date neurology for the patient on the MSCC Referral Form to facilitate appropriate decision making

7.1 Preliminary Management

In order to preserve optimum neurological function and facilitate best practice, patients should be managed as follows:

- The patient should be commenced on oral (PO) or intravenous (IV) dexamethasone, with a stat dose of 16 milligrams (mg) with the exception of patients with **multiple myeloma**. In these cases the steroid dose should be agreed with the haemato-oncologist responsible for the patient.
- The patient should continue on 16 mg dexamethasone PO or IV a day, in two doses (8mg BD)
- The patient should be started on gastric protection whilst on steroids (Lansoprazole 30mg once a day)

- The patient should be assessed spinally and neurologically according to local policy. The frequency of these observations should **increase** if there is a deterioration in neurological function

- Patients should be nursed using spinal precautions for an unstable spine (as per Trust policy) until the stability of the spine is **confirmed** by the Lead MSCC Co-ordinator following review of the scan by the **Surgical Clinical Advisor** on call. (see section 7.2)

- The patient should be kept nil by mouth with IV fluid support if there is an indication that the patient may require immediate surgery

- The patient should be considered for a urinary catheter if they are developing or showing signs of urinary retention or have an unstable spine which does not allow them to use a bedpan safely

- Comprehensive bowel management is essential including immediate prescribing of oral aperients where appropriate

The patient should have their level of pain assessed using a recognised pain assessment tool on presentation and at regular intervals to facilitate assessment of their pain control needs. The patient needs to given effective, regular and appropriate analgesia. Consider early referral to the acute pain service and/or palliative care team for specialist pain management.

7.2 Spinal Stability

Patients should be nursed using spinal precautions for an unstable spine (as per Trust policy) until the stability of the spine is **confirmed** by the Lead MSCC Co-ordinator following review of the scan by the **Surgical Clinical Advisor** on call.

The LCA guidelines for spinal instability are as follows:

Initial Precautions

Patients with severe pain suggestive of spinal instability, or any neurological symptoms or signs suggestive of MSCC, should be nursed flat with neutral spine alignment (including 'log rolling' and use of a slipper bed-pan) until bony and neurological stability are ensured.

- Assume the spine unstable until clearly documented in the medical notes
- Full neurological assessment including PR examination
- Respiratory assessment and treat as appropriate
- Nurse patient with spine in neutral alignment
- For cervical lesions, ensure immobilisation with hard collar (refer to local policy for fitting procedures)

Spine stability after definitive treatment

- Please refer to NICE guidance on the management of MSCC
- Ensure referral to physiotherapist within 24 of admission
- Consider spinal brace
- Gentle mobilisation under instruction when pain well controlled
- Encourage gradual sitting from supine to 45 degrees, once tolerated progress to 60-90 degrees as able. Monitor neurology and pain during this process

- Manual handling risk assessment, wheel chair assessment where needed

7.3 Surgical Intervention

If emergency surgical intervention has been agreed then immediate transfer will be arranged. The Lead MSCC Co-ordinator will liaise with the Neuroscience Bed Manager/corresponding unit (within normal working hours) or the On-call Neurosurgical Registrar will liaise with directly with the senior nurse on Neurosurgical Unit/corresponding unit (out of normal working hours). The aim is for patients to be transferred from the referring unit and admitted to a bed within St George's Hospital within 24 hours dependant on capacity.

Patients with rapidly progressive cord lesions may undergo emergency surgery out of normal working hours, however, wherever possible surgery will be performed within normal working hours according to standard practice.

7.4 Oncological Management

If surgery is **not** indicated for the patient with MSCC then the Lead MSCC Co-ordinator will feed this decision back to the referrer immediately. An **immediate follow-up discussion** should take place between the referrer and the Clinical Oncologist on call at the Cancer Centre to arrange urgent radiotherapy. They will already know about the patient following initial referral discussion and having received the referral form and scans.

If the patient is being referred to the **Royal Marsden Hospital** the referrer must go through switchboard and ask to speak to the Clinical Oncology SpR on call.

If the patient is being referred to the **Royal Surrey County Hospital** then the referrer must contact their switchboard and ask for the Clinical Oncology SpR on call or the 'Oncology Hot Bleep'.

The patient will remain in their referring unit and will be transferred to the Cancer Centre as an inpatient or attend as an outpatient for urgent radiotherapy. The Lead MSCC Co-ordinator will ensure the referrer is aware of the process and confident of ongoing communication channels to ensure the patient receives their definitive treatment quickly and efficiently.

8. Specialist Multi-Disciplinary Team (SMDT) Discussion

The Neurosciences SMDT meeting takes place on a Friday am at 08.00 hours in the radiology Seminar Room, 2nd Floor, Atkinson Morley's Wing, St George's Hospital. The MDT Co-ordinator can be reached on 020 8725 4191 via e-mail on

stgh-tr.Neuro-OncologyMDT@nhs.net

Patients referred into the South West London MSCC Service via Pathway One and have a confirmed diagnosis of MSCC will have a **retrospective** discussion. Following surgery they will be added to the next Neurosciences specialist MDT by the Lead MSCC Co-ordinator. The Lead MSCC Co-ordinator will fax a copy of the patient's discharge summary and histology within 24 hours of histological confirmation to both the patient's Oncologist and their GP.

Patients referred to the South West London MSCC Service via Pathway One or Pathway Two and have bony metastases with pending rather than actual MSCC will have a **prospective** discussion. Referrers will be asked to liaise with the MDT Co-ordinator to ensure that the patient's scans are present and correct, that the referral form is completed and returned and that there are agreed pathways for feeding back the decision and ongoing management. The Lead MSCC Co-ordinator will ensure feed back of the outcome of the Neuroscience SMDT within 24 hours of the discussion taking place.

9. Nursing Management

9.1 Autonomic Dysreflexia

• Alterations of sympathetic vascular tone, relative parasympathetic over-activity and respiratory muscle paralysis may cause complex and sometimes life-threatening vascular, cardio-respiratory and autonomic changes in people with MSCC.

• Autonomic dysreflexia is a potential complication with any patient who has complete paralysis above T6. This medical emergency is caused by excessive activity of the sympathetic nervous system elicited by noxious stimuli below the level of the lesion. Unresolved, it can cause fatal cerebral haemorrhage.

• Common presenting symptoms of autonomic dysreflexia:

- Severe hypertension (abrupt rise) – Systolic BP can exceed 200mm/Hg
- Bradycardia
- 'Pounding' headache
- Flushed or blotchy appearance of skin above the level of lesion
- Profuse sweating above the level of the lesion
- Pallor below the level of lesion
- Nasal congestion
- Non-drainage of urine

• Management of acute autonomic dysreflexia is the removal of any causes of noxious stimulation, eg blocked catheter, constipation, undue pressure upon extremities/other body areas, and or administration of a beta-blocade in a critical care environment. If present it is both indicative of a complete spinal cord lesion and a near absolute contraindication to surgery.

9.2 Pain Management

• Pain assessment should be carried out on admission and re-assessed daily or more frequently depending on the severity of pain or level of distress.

• A formalized pain assessment tool should be used in partnership with the patient to obtain a comprehensive assessment of each individual site of pain identified.

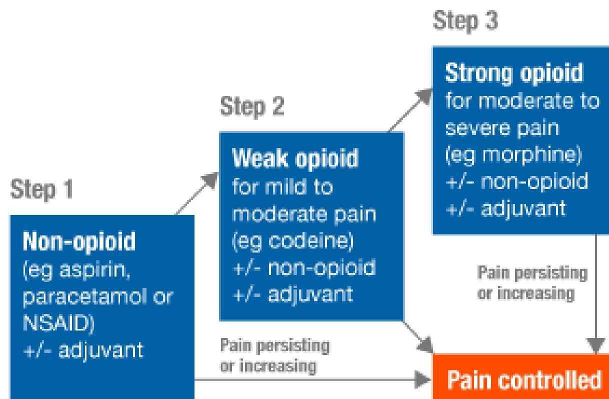
• Following pain assessment, prompt pain management should be initiated to maximize pain relief.

• It is recommended that the principles of the WHO Analgesic ladder (Figure 2) are used for pharmacological management of pain in combination with other non-pharmacological modalities (e.g. relaxation and gentle massage).

• Patients should be referred to the specialist palliative care team for assessment and advice regarding pain management

• A multidisciplinary approach to pain management is recommended.

Figure 2. WHO Analgesic ladder



9.3 Thrombopropylaxis

• Patients with MSCC are at increased risk of developing venous thromboembolic events. This is due to a combination of a 'hypercoaguable state' as a complication of malignancy and reduced mobility as a result of MSCC

• Other risk factors for thrombo-embolic disease should be considered, including recent chemotherapy, surgery, previous history of thromboembolic disease, the use of oestrogenic drugs such as Tamoxifen and Stilboestrol, and patients with indwelling venous catheters.
• Patients should be assessed for thromboprophylaxis on admission, according to local Trust protocols.

• Consider anti-embolic stockings (TEDS) if unlikely to be mobile for >3 days.

• If patient likely to be immobile for >24 hours and no contra-indications, start low molecular weight heparin (LMWH) at a prophylactic dose (e.g. Dalteparin 5000iu SC daily)

9.4 Bladder Management

• MSCC can cause progressive nerve compression that can result in urinary retention, incontinence or large post-voiding residual volumes.

• The type of and degree of bladder dysfunction depends on the site and extent of damage to sensory and motor tracts of the spinal cord.

- If the MSCC is above T12, the patient will have an upper motor neurone (spastic) bladder – incontinence, no voluntary control of bladder emptying
- If the MSCC is below T12, the patient will have a lower motor neurone (flaccid) bladder – urinary retention, dribbling incontinence when bladder is overfilled, large post-voiding residual volumes

- Some patients may have a ‘mixed’ bladder when there is only partial compression of the spinal nerves

• Assessment of bladder function on initial presentation is vital for effective bladder care management.

• Patients with no symptoms should be monitored daily for any changes.

• Patients who have urinary incontinence, urinary retention or are unable to use a bedpan safely due to an unstable lumbar spine should be catheterized.

• If long term catheterization is required, intermittent catheterization or suprapubic catheters should be considered.

9.5 Bowel Management

• Altered bowel function is a common problem in patients with MSCC or cauda equine syndrome.

• The patient may become severely constipated due to decreased mobility, loss of rectal sensation, poor anal and colonic tone, use of opioids and other analgesics, and anorexia.

• Constipation can lead to overflow diarrhoea, abdominal distension, nausea and vomiting.

- If the MSCC is T12 or above, the patient will have an upper motor neurone (spastic) bowel – anal sphincter tone maintained, bowel will contract and empty when stimulated
- If the MSCC is L1 or below, the patient will have a lower motor neurone (flaccid) bowel – anal sphincter will be flaccid, faecal retention and overflow of faecal fluid may occur
-

• Assessment of bowel function on initial presentation is vital for effective bowel care management.

• Patients with no symptoms should be monitored daily for any changes.

• Patients should be managed according to a neurological bowel management programme. The aim of bowel care in patients with MSCC is to attain a ‘controlled continence’.

• Establish a regular bowel routine:
- Review diet and fluid intake (aim for a high fibre diet and high fluid intake).
- Regular oral laxatives with PR intervention every 1-3 days may be required

Example of oral laxative regime:
Softener – Sodium docusate 200mg BD
Stimulant – Senna 2 tabs at night, or Movicol 1-2 sachets daily

Example of regular PR intervention regime:
Suppositories – Bisacodyl and glycerine (on alternate nights)
If not effective, may require microlax enema or gentle manual evacuation
• If faecal loading:
- 1st line – glycerine or bisacodyl suppositories or microlax enema
- 2nd line – arachis oil enema overnight
- 3rd line – phosphate enema
- 4th line – gentle manual evacuation (generally required if flaccid bowel)

9.6 Pressure Area Care

• Patients with MSCC are at high risk of developing pressure sores, due to impaired mobility and sensation, and compromised bladder and bowel function.

• If on bed rest, patients should be log-rolled every 2-3 hours.

• Patients with reduced sensation and restricted mobility should be offered pressure relieving cushions and/or mattresses with high pressure relieving properties (refer to local Trust policy on pressure ulcer risk assessment and prevention)

• Skin inspection should be carried out systematically at least once a day (frequency determined by the patient's individual condition)

• The following signs may indicate incipient pressure ulcer development: persistent erythema, non-blanching hyperaemia, blisters, discolouration, localized heat, localized oedema and localized induration, In those with darkly pigmented skin: purplish/bluish localized areas of skin, localized head which if tissue becomes damaged, is replaced by coolness, localized oedema and localized induration.

• Skin changes should be documented/ recorded immediately to classify ulcer stage and extent of tissue damage.

10. Rehabilitation

The South West London MSCC Service has adopted the Interim Common Cancer Rehabilitation Pathway. This is a national evidence based pathways available at http://webarchive.nationalarchives.gov.uk/20130513211237/http://www.ncat.nhs.uk/sites/default/files/work-docs/Cancer_rehab-making_excellent_cancer_care_possible.2013.pdf

Rehabilitation and supportive care services for patients with MSCC may include:

- Physiotherapy
- Occupational Therapy
- Speech & Language Therapy
- Dietetics
- Lymphoedema services
- Complementary therapy services (NCAT 2010)

A comprehensive overview of the rehabilitation provision within the area covered by South west London Hospitals and SWSHCN is provided in **Appendix 6**.

Ongoing re-assessment at key stages of the patient pathway is recommended with any changes in the patient's clinical presentation (DH,MCS & NHSI 2010). This is necessary during acute community (including out-patient services) and voluntary (third) sector services. Where appropriate, access to intensive rehabilitation units should be provided. The potential benefits of specialist in-patient neurological and functional rehabilitation have to be weighed against the time required to achieve

these (often small) gains for patients with MSCC. Additionally the general health and ability and wish to return home of patients with a life-limiting diagnosis and decreasing functional ability needs to be considered (NICE 2008).

The rehabilitation of patients with MSCC should focus on their goals and desired outcomes, which could include promoting functional independence, participation in normal activities of daily life and aspects related to their quality of life (NICE 2008)

To ensure a holistic approach, it is essential that local service provision provides specialist rehabilitation including: vocational/leisure interests, equipment provision, environmental adaptation, and psycho-social support (NICE 2008, Macmillan 2009).

References

Department of Health (DH), Macmillan Cancer Support (MCS), NHS Improvement (NHSI). National Cancer Survivorship Initiative 2010. (Available at: http://www.ncsi.org.uk)

Macmillan (2009) Returning to Work: Cancer and Vocational Rehabilitation. http://www.ncsi.org.uk/wp-content/uploads/Vocational-Rehabilitation-Strategy-Paper1.pdf

NCAT (2010) Interim Common Cancer Rehabilitation Pathway. National Cancer Action Team. London www.cancer.nhs.uk/rehabilitation or

http://webarchive.nationalarchives.gov.uk/20130513211237/http://www.ncat.nhs.uk/sites/default/files/work-docs/Cancer_rehab-making_excellent_cancer_care_possible.2013.pdf or http://ncat.nhs.uk/sites/default/files/NCAT_Rehab_BrainCNS.pdf

NICE (2008) *Metastatic Spinal Cord Compression. NICE, London.*

11. Supportive Care

Symptom control and palliative care provision is central to the care provided for patients with metastatic disease, and in particular MSCC. It is crucial to ensure that patients are referred to palliative care at the right time in the pathway. For some patients this will be at the time of diagnosis. The LCA referral criteria for specialist palliative care stipulate the following referral criteria:

- Pain and symptom management
- Meeting the psycho-social needs of the patient & their family, and/or significant others
- Terminal care/dying

The referral can be made by any health care professional, but has to be agreed by the medical team. The reasons for referral should always be explained by the medical/surgical team with the patient and family/ carers. If the referral is for terminal care this should have been discussed specifically with the patient/family/carer by the medical/surgical team.

The Lead MSCC Co-ordinator should work in close collaboration with the specialist palliative care team. If the patient is being managed in the referring unit and not being transferred then the Lead MSCC Co-ordinator will ensure that the referring team refer the patient to the specialist palliative care team at the corresponding unit.

If the patient is an inpatient at St George's Hospital, the referral can be made at the Neuroscience SMDT or at any other time in the week. If the patient is at another hospital or in the community, the Neuro-oncology CNS should inform the referring team about the SMDT decision to refer to specialist palliative care.

For patients who are due to be transferred back to the referring hospital and who do not require urgent specialist palliative care, the Lead MSCC Co-ordinator will refer to the specialist palliative care team in the referring hospital. If a patient requires urgent palliative care and immediate intervention on transfer, the specialist palliative care team will liaise with their specialist palliative care team colleagues within the referring hospital.

To ensure that this seamless transition and collaboration occurs, a member of the palliative care team attends the Neuroscience SMDT.

For patients at home, the service is provided by community palliative care teams. The initial discussion and referral to the community team predominantly takes place during the treatment planning stage at SGH, RMH or RSCH, unless the patient requires urgent referral for symptom control or psychological support. In this situation, the specialist palliative care team will review the patient and liaise directly with their colleagues in the community palliative care team to ensure an urgent referral for symptom control or psychological support. This would be initiated by the hospital palliative care team and then referred to the community team on discharge.

12. <u>Audit</u>

The South West London MSCC Service will be required to complete audit data agreed by the LCA AOS Pathway Group/MSCC subgroup to monitor the following:

- The timeliness of referral (from patient presentation to Network MSCC Service contact)
- The appropriateness of referral (based on scan findings/neurological assessment)
- Time to scan
- Speed of image transfer
- Effective completion and timely completion of referral form
- Speed of decision to treat and communication of definitive treatment
- The date of SMDT discussion
- The timeliness of transfer for surgery
- The timeliness of commencement of radiotherapy
- The timeliness of ongoing communication to patient's Oncologist and GP

- Outcome data at 1 month, 3 months, 6 months and at a year. The outcomes measured are mobility, sphincter function and pain.

The results on this ongoing audit will be presented on a **yearly** basis to the following groups for dissemination:

- The local AOS Group
- The local Clinical Cancer Directorate (if applicable)
- The LCA AOS Pathway Group
- The LCA Brain and CNS Pathway Group

Appendix 1 – MSCC Alert Card and Information Leaflet

LONDON CANCER ALLIANCE LCA

NHS

METASTATIC SPINAL CORD COMPRESSION

Metastatic spinal cord compression (MSCC) and damage can develop if cancer has spread to the spinal cord (spinal metastases). If you develop any of the following 3 symptoms of MSCC telephone the contact numbers below URGENTLY:

- A narrow band of severe pain down your arm or leg or around your body
- Numbness, weakness or difficulty using your arms or legs
- Bladder or bowel control problems

Mon-Friday contact:
All other times contact:

SPINAL METASTASES

If you develop any of the following symptoms of spinal metastases, please contact your doctor, GP or palliative care team within the next 48 hours:

- Funny feelings, odd sensations or a sense of heaviness in your legs
- Unsteadiness when walking, especially on stairs
- Back pain that is new or different, which may become worse when lying flat and keeps you from sleeping
- Back pain that doesn't get better with painkillers
- Agonising back pain, which is extremely difficult to bear

This leaflet is to help you understand more about spinal cord compression. You may also have been given this leaflet together with an 'alert' card.

What is spinal cord compression?

This can happen when there is pressure on the nerves in the spine that carry messages between the brain and the rest of the body. These nerves are known as the spinal cord.

Who can get spinal cord compression?

The cord can become compressed if:

- the bones of the spine (vertebrae) are affected by a primary cancer or secondary cancer in the spine (spinal metastases)
- the cancer has spread to other tissues around the spine.

Spinal cord compression must be treated urgently. Otherwise it can lead to serious disability, including permanent paralysis and early death.

What are the symptoms?

- a narrow band of pain down your arm or leg or around your body.
- numbness, weakness or difficulty using your arms or legs.
- bladder or bowel control problems.

There is an 'alert' card available from your clinical team with the symptoms to look out for and actions to take.

Diagnosis

Diagnosing spinal cord compression quickly can help to prevent spinal cord damage and disability. Depending on the symptoms, you may be advised to go to hospital for a scan and possible treatment. Usually you will have an MRI scan although you may be offered a different scan. This will help your clinical team to make decisions about the best treatment for you.

How is spinal cord compression treated?

Treatment for spinal cord compression should start as quickly as possible (ideally within 24 hours of being admitted to hospital).

Your clinical team will discuss your treatment options with you and you should be involved in all decisions about your treatment and care. You may be offered one or several of the following treatment options:

Painkillers (analgesics): they may be mild or strong.

Corticosteroids: medicines that help to reduce swelling and relieve the pressure of the cancer on your spinal cord.

Radiotherapy: radiation treatment directed at your spine to destroy cancer cells and relieve the pressure on your spinal cord.

Surgery: an operation to help relieve the pressure on your spinal cord and strengthen your spine.

Kyphoplasty and vertebroplasty: injections of a special bone cement into the spine to help ease pain and strengthen your spine.

Chemotherapy: may occasionally be used for tumours that are sensitive to chemotherapy drugs.

Bisphosphonates: medicines that help to relieve pain and protect the bones in your spine.

Care in hospital

Your symptoms may mean you need to stay in bed. This is to reduce the movement of your spine to protect your spinal cord from further damage. You may be asked to lie flat and your clinical team will monitor you when you first start to sit up. Health professionals such as physiotherapists and occupational therapists may also offer you advice on what support you need to move around safely.

Blood clots: you are at risk of developing a blood clot if you are unable to move around. Your clinical team will advise you on how you can reduce this risk.

Pressure sores or ulcers: reducing how much you move around, can also increase your risk of developing pressure sores or ulcers. You will be helped to change position regularly if you are unable to do this yourself. A special mattress may help prevent sores developing.

Bowel or bladder control problems: you may need help with bladder and/or bowel care. If you are unable to pass urine, you may need a catheter to help empty your bladder. If bowel function is a problem you may need medicines which may help improve it. Your clinical team will monitor your bladder and bowel function regularly, even if you don't have problems.

Going home after treatment

Most people will be able to go home after hospital treatment. However, some people may be offered specialist rehabilitation from physiotherapists and occupational therapists. You may need additional support and equipment at home from your local community services to help you regain some independence.

Your family and carers should also be offered support and training so that they feel confident in caring for you at home. You should also be offered information on how to access psychological and spiritual support if you feel it would be helpful.

The information in this leaflet has been taken from the National Institution for Health and Clinical Excellence (NICE) guidance document, which is available from their website www.nice.org.uk.

- CG75 Metastatic spinal cord compression: understanding NICE guidance (2008)

Please ask if you would like the information in this leaflet in a different language.

Further information

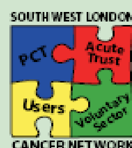
Macmillan Cancer Support
89 Albert Embankment, London SE1 7UQ
Helpline: 0808 808 00 00
Website: www.macmillan.org.uk
Provides free information and support on all aspects of cancer, including details of local cancer support groups and organisations near you.

Cancer Research UK
PO Box 123, London WC2A 3PX
Cancer Information
Helpline: 020 7061 8355 or 0800 226237 (freephone)
Website: www.cancerhelp.org.uk
Offers an information and support helpline and publications are available from their patient information website.

Contact details

Name: ____________________

Tel: ____________________



www.swlcn.nhs.uk
Tel: 020 8407 3935

July 2011

Spinal cord compression and damage to the spinal cord

Information for patients

about the care and treatment of people who have, or are at risk of developing, spinal cord compression due to primary or secondary cancer in the spine (spinal metastases).

St George's University Hospitals NHS Foundation Trust

The South West London Metastatic Spinal Cord Compression (MSCC) Service Access Pathways

Patient with prior diagnosis of cancer or unknown primary with symptoms suggestive of spinal metastases /metastatic spinal cord compression (MSCC):
- Severe, intractable, progressive pain - especially in thoracic region
- New spinal nerve root pain (burning, shooting, causing numbness)
- Altered sensation and/or reduced power in limbs
- Bladder and/or bowel disturbance (i.e. new onset of incontinence)

Pathway One

Symptoms suggestive of spinal metastases (with neurological symptoms) or signs suggestive of MSCC

Contact Lead MSCC Co-ordinator and Clinical Oncology immediately. Discuss patient with AOS Service. Urgent MRI (or CT if MRI not possible) <24hours (sooner if paralysis imminent and emergency surgery proposed). Transfer MRI/CT images to MSCC Centre and Cancer Centre via IEP urgently for review. E-mail referral form to MSCC and Cancer Centre **(Refer to Patient Flow Chart)**

Pathway Two

Symptoms suggestive of spinal metastases (without new neurological symptoms)

MRI within 7 days. Contact Local MSCC co-ordinator within 24 hours of MRI scan. Transfer MRI images via IEP for review and decision making.
E-mail referral form to MSCC Centre.

Pathway Three

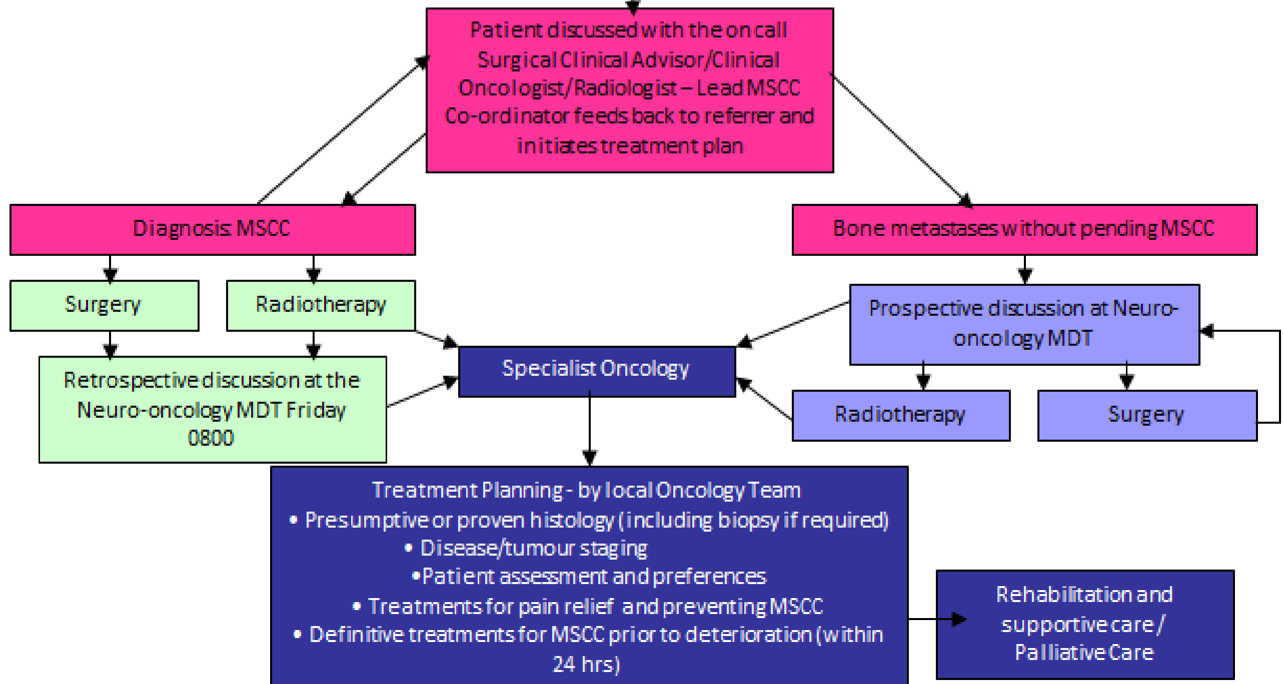
Non specific lower back pain

Locally managed standard back care (outside remit of MSCC Guidelines)

Continue frequent observation to monitor symptom progression. If symptoms persist or progress refer via Pathway One or Two

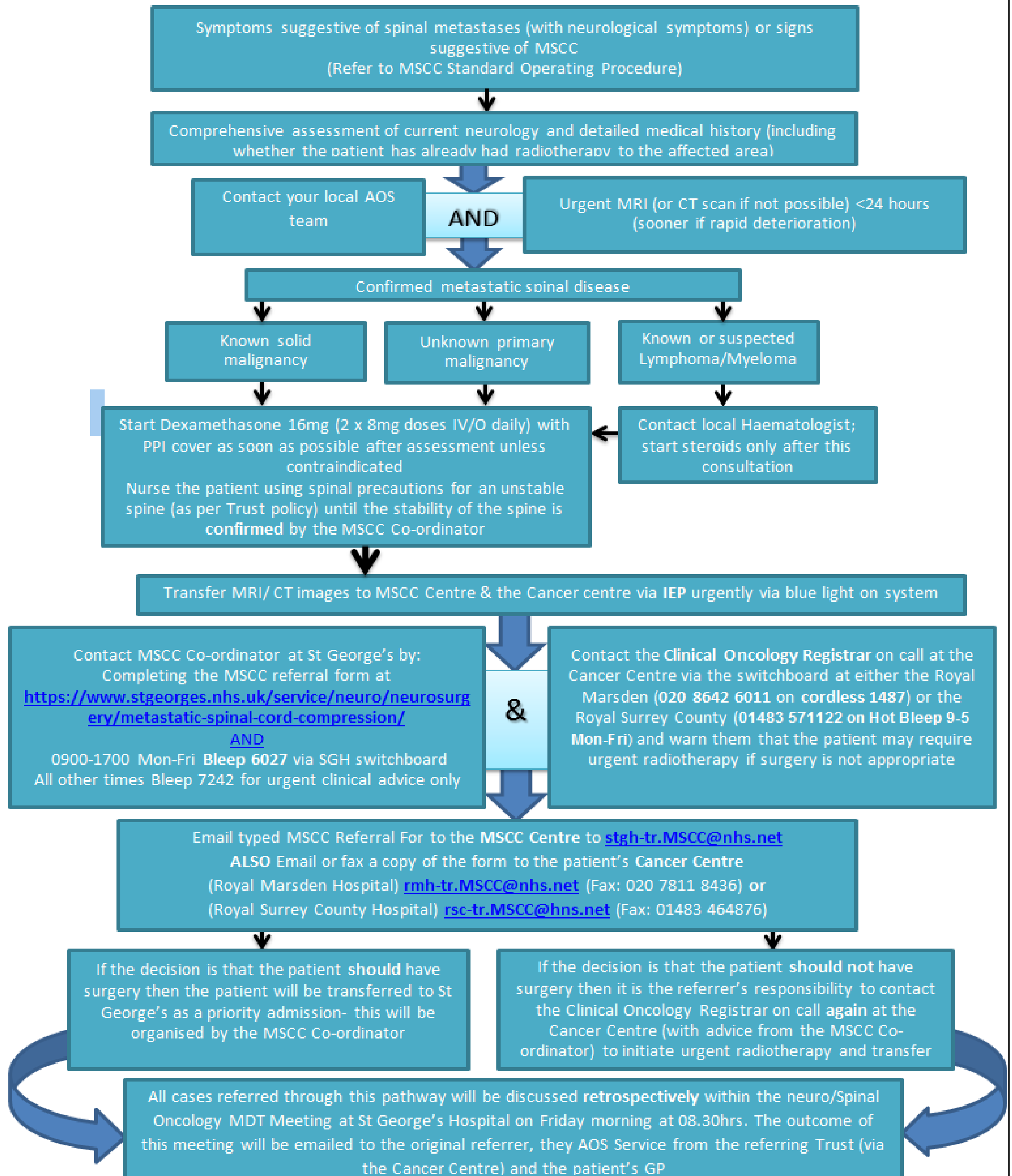
Contact Details for South West London MSCC Service

St. Georges Switchboard - 0208 672 1255
Lead MSCC Co-ordinator: **Bleep 6027** (office hours)
Neurosurgery SpR: **Bleep 7242** (Out of hours)
RMH contact: **020 8642 6011** St Lukes Cancer Alliance Contact: **01483 571122**
Neuro–oncology MDT Friday 08:30 hrs at St Georges Hospital



South West London MSCC Service – Access Pathways – Version 9 – July 2014 – Review date - July 2015

Appendix 3 – Referral Flowchart for the South West London MSCC Service



Appendix 4 – Local MSCC Co-ordinator Contacts

South West London Hospitals– Acute Oncology Service Contacts

Trust	Name	Role	Contact Number
Epsom and St Helier NHS Trust – Epsom Hospital	Dr David Watkins	AOS Consultant	07917 553735
Epsom Hospital	Dawn Brewer	AOS CNS	07826 859516
Epsom and St Helier NHS Trust – St Helier Hospital	Dr Jaishree Bhosle	AOS Consultant	07584508099
St Helier Hospital	Julia Lowes	AOS CNS	07826859570
Kingston NHS Trust	Thora Thorhallsdottir or Lesley Chamberlain or Lorraine Hyde Katharine Aitkin Dr Marina Parton	AOS CNS AOS Consultant	Bleep 086 via switchboard 07946 548990 07703 727185
Croydon University Trust	Nicola Beech	Nurse Consultant and AOS Lead Advanced Nurse Practioner	Ext 5726, Bleep 946 via switchboard or 020 8401 3000

SLCA – Acute Oncology Service Contacts

Trust	Name	Role	Contact Number
Royal Surrey County NHS Foundation Trust	Sam Russell or Aga Kehinde Dr Simon Page Dr May Teoh	AOS CNS AOS Specialty Doctor AOS Consultant	01483571122 Bleep 71-0727 01483571122 Bleep 71-4490 m.teoh@nhs.net
Frimley Park NHS Foundation Trust	Shobana Srinivasan or Joseph Peralta Mary Hayes Dr Nita Patel	AOS CNS Lead Nurse for Cancer & Palliative Care AOS Consultant	01276526342 Bleep 670/710 01276 526904 nita.patel12@nhs.net
Ashford and St Peter's Hospitals NHS Trust	Faithe Cockroft or Sian Wing Sarah Burton Dr May Teoh	AOS CNS Lead Nurse for Cancer & Palliative Care AOS Consultant	01932722684 or 0193287000 Bleep 8441 01932722851 or 01932872000 Bleep 8176 m.teoh@nhs.net
Surrey and Sussex Healthcare NHS Trust – East Surrey Hospital	Lisa Jacques or Tina De La Cruz	AOS CNS	01737768511 ext 6984/ Bleep 956

	Dr Eirini Thanopoulou	AOS consultant	eirini.thanopoulou@nhs.net

Appendix 5 – South West London MSCC Service Referral Form

St George's University Hospitals NHS
NHS Foundation Trust

London Cancer Alliance (LCA) and Surrey West Sussex and Hampshire Cancer Network (SWSHCN) Metastatic Spinal Cord Compression (MSCC) Referral

Every referral must have this form completed and emailed to stgh-tr.MSCC@nhs.net

AND

0900-1700 Mon-Fri Bleep 6027 via SGH switchboard
All other times Bleep 7242 for urgent clinical advice only

All fields are mandatory.

Patient Details		Hospital Details	
Surname		Referring Hospital	Choose a Hospital
Forename		Your Name	
Date Of Birth	(dd/mm/yyyy)	Your Designation	Choose a Designation
NHS Number		Your Email	(NHS email)
Address		Bleep/Mobile	
		Consultant	
Postcode		Consultant Email	(NHS email)
Telephone			
GP Name		Where is the patient currently?	Choose
GP Address		Hospital and Ward:	Contact Number:
		Date of admission	(dd/mm/yyyy)

Brief and Relevant Clinical Details

Clinical History (MUST include presenting condition; motor & sensory status:

Previous medical history:

Exact date of first onset of symptoms: (dd/mm/yyyy)

Motor Score: Upper Limb Left Choose Upper Limb Right Choose Lower Limb Left Choose Lower Limb Right Choose	**Pain:** Choose Specific Location: Severity(0 no pain to 4 severe pain): Choose	**Primary:** Choose If known primary specify site: If primary is unknown have you discussed the patient with the Acute Oncology team? Choose If primary is known have you spoken to their current oncologist? Choose
Incontinence: Urinary: Choose Date onset: (dd/mm/yyyy) Date Catheter inserted: (dd/mm/yyyy) Faecal: Choose Date Onset: (dd/mm/yyyy)	**Mobility:** Choose Date last walked: (dd/mm/yyyy) **Sensory:** Choose Specify:	
Previous oncological treatment: Choose Intent of treatment: Choose Date last given: (dd/mm/yyyy) If Radiotherapy, to which area:	**Prognosis:** Choose TNM Status:	**Haematological:** Do you suspect Lymphoma/ Myeloma? Choose Have you spoken to the Haematologist/AOS? Choose

Oncologist(if known):

Steroid Administration (Give 16mg bolus of Dexamethasone followed by 8mg BD with PPI cover): Choose a relevant option

Anticoagulant/Antiplatelet Use Choose a relevant option Specify:

Performance Status: Prior to presentation: Choose relevant option **Current Presentation:** Choose relevant option

Staging Information			Patient's status
MRI whole spine	Choose	Date: (dd/mm/yyyy) Time:	Has the patient been told their diagnosis? Choose
Other Scans	Choose if appropriate		Do they wish to consider surgery? Choose
Outcome of Staging:			

Additional Information that may be useful to us	
Please send the completed form **immediately** via e-mail to stgh-tr.MSCC@nhs.net If you need to discuss an emergency **Neuro-Surgical** referral out of office hours please contact the **Neuro-Surgical registrar on call (Bleep 7242)** at St George's Hospital **Name of Neuro-Surgical registrar contacted:** **Date:** (dd/mm/yyyy) **Time:** **Please call the MSCC Coordinator to inform them of this referral**	Have **you** spoken to the **Clinical Oncologist on call** at the Cancer Centre and pre-warned them of a potential emergency referral for radiotherapy if surgery is inappropriate? **Name and Contact details:** **If not**, please contact the on call Clinical Oncology SpR at either RMH or the RSCH (both via their switchboards) Please also send a copy to the Cancer Centre: **Royal Marsden Hospital** rmh-tr.MSCC@nhs.net Fax(020 7811 8436) **Royal Surrey County Hospital** rsc-tr.MSCC@nhs.net (Fax 01483 464813)

PLEASE NOTE
It is the responsibility of the referring team to ensure that ALL relevant imaging studies are made available on the SGH PACS via the IEP and that all the fields in this form are filled correctly. The two biggest sources of delay in opinions are: no scans being transferred and incomplete forms.

Appendix 6 - Rehabilitation Facilities within Areas covered by the South West London Hospitals and SWSHCN

Location	Service	Level	Description	Brief outline of service	Contact Details	Dire (p n
Wandsworth	**St. George's Hospital**		Major trauma centre	Acute Trust	0208 672 1255	
	Queen Mary's Hospital	2	Local rehabilitation unit	>16 years; Inpatient neuro (14 beds) & elderly; outpatient & community services	0208 487 6000 Blp 151	
	Wolfson Rehabilitation Centre at St George's Hospital (Thomas Young Ward)	1	Regional neurorehab unit	>18 years; neurorehab incl. head injury; 32 inpatient beds - up to 12 weeks LOS	020 8725 6544	
	Dawes House	3b	ICT bed-based	>16 years; residential home with x16 ICT beds (up to 6 weeks rehab); transfer with assistance 1-2	0207 326 8860	
	ICT Community Team	3b	ICT home	ICT home	0208 812 5000	
	St. John's Therapy Centre	3a/3b	Community & Day Hospital	Community & outpatient services	0208 812 4070	
	Brysson Whyte Centre	3b	Day Hospital	>65 years; Elderly & falls	020 8487 6170	
	Wandsworth Community Wards	3b	Community	Community & outpatient services	Tel: 020 8812 5678	
	Wheelchair Service		Regional wheelchair service		0208 487 6084	
	Trinity Hospice		Palliative hospice care	Inpatient, outpatient and day services	2077871065	
Merton & Sutton	**St. Helier's Hospital**		Trauma unit	Acute Trust		
	Parkside Hospital		*Private Hospital*		0208 971 8021	
	Woodlands (Merton)	3b	ICT bed-based	>65 years; residential home with x12 ICT beds (up to 6 weeks rehab); full WB; transfer with assistance x1		
	Crossways (Sutton)	3b	ICT bed-based	>65 years; residential home with x6 ICT beds (up to 6 weeks rehab); full WB; transfer with assistance x1		
	All Saints Centre (Wimbledon)	3a	Community Centre	16-65 years; physical disability - many neuro; independent in wheelchair	0208 542 9587	
	Carshalton War Memorial Hospital	3b	Community Hospital	Community & outpatient services	0208 770 8000	
	Nelson Hospital	3b	Community & Day Hospital	Community & outpatient services	0208 296 2000	
	Sutton Hospital	3a/3b	Community Hospital	Community incl. amputee service	0208 296 4130	
	Wilson Community Hospital	3b	Community Hospital		0208 687 4833	

	MILES	3b	Reablement		0208 545 4361
	Wheelchair Service		Local wheelchair service		0208 254 8382
	St Raphaels Hospice (Sutton)		Palliative hospice care	Day service, community palliative team, inpatient	0208 335 4575
	Royal Marsden (Sutton and Fulham)		Specialist Oncology hospital	Outpatient and inpatient Physio and SALT, inpatient OT	Sutton 0208 642 6011 Fulham 0207 3528127
Lambeth	**King's College Hospital**		Major trauma centre	Acute Trust	0203 299 9000
	St. Thomas' Hospital		Trauma unit	Acute Trust	
	Frank Cooksey	1	Regional neurorehab unit	>16 years; 15 beds; Neurorehab incl. head injury	0207 346 5325
	Pulross Centre	3b	ICT bed-based	1 ward; 16-65 years; Lambeth resident (SW2, SW4, SW8, SW9, SW16, SE24, SE11)	0207 411 6605
	Lambeth Community Care Centre	3b	ICT bed-based	1 ward; GP referral	0207 587 5513
	Whittington Centre	3b	Community & Day Hospital	Community & outpatient services	0203 049 4004
	TACT	3b	ICT home	ICT home/supported discharge - only therapy input (no care provided)	0203 049 4004
	LIET	3b	Reablement		0207 926 5854
	SWIFT	3b	Social Services		0207 926 5854
	Southwark ICT	3b	Intermediate care		0207 525 3962
	Wheelchair Service		Local wheelchair service		0203 049 7729
	St Christophers Hospice		Palliative hospice care	Inpatient, home care services, clinic based appointments	0208 768 4500
Croydon	**Croydon University Hospital**		Trauma unit	Acute Trust (amputee service with prosthetist)	0208 401 3000
	Croydon ICT (CICS)	3b	Intermediate care	ICT bed or home (up to 6 weeks rehab)	0208 274 6444
	Broad Green Centre	3a/3b	Community	Community & outpatient services; neuro rehab	0208 274 6880
	Thornton Heath		Community	Community & outpatient services	0208 274 6830
	Beechwood Care Home				
	Hayes Court Care Home				
	Hill House Care Home				
	Wheelchair Service		Local wheelchair service		0208 665 9313

Kingston	**Kingston Hospital**		Trauma unit	Acute Trust	0208 546 7711
	Hobkirk Rehabilitation/Recuperation 'Step up Unit'		Community	residential home with 24-hour care + rehab	0208 274 7088
	Moseley Rehabilitation Hospital				0208 941 4481
	Surbiton Hospital		Community Hospital		0208 399 7111
	Teddington Hospital		Community Hospital		0208 408 8210
	Cedars Community & Inpatient Service (Tolworth Hospital)	3b	Intermediate care/Community	ICT bed or home (up to 6 weeks rehab); domicilary physio	0208 274 7088
	Kingston single point of access		Community	Community & outpatient services	0208 274 7088
Ricmond & Twickenham	**West Middlesex Hospital**		Trauma unit	Acute Trust	
	Richmond Rehabilitation Unit				
	Richmond ICT				0208 714 4060
	Community Rehabilitation Team				0208 630 3943
Surrey	**East Surrey Hospital**		Trauma unit	Acute Trust	01737 768511
	Caterham Dene Rehabilitation Unit	3b	Community Hospital	Inpatient elderly	01883 837517
	Promoting Independence Programme	3b	Community	Inpatient & community elderly	01737 768511
	Surrey Community Health: Domiciliary Physiotherapy	3b	Community	>18 years; East Surrey GP	01737 768511 x6265
	Community Neuro Physiotheapy Team	3a	Community	>16 years: acute neuro	01883 733890
	Community Learning Disabilities Team	3a	Community	>18 years; East Surrey GP	01737 281071
	Crawley Hospital	3a/3b	Community Hospital	Inpatient elderly, ortho & stroke	01293 600300 Blp 159
	Crawley Intermediate Care (CHAPS)	3b	ICT Home	>18 years; Crawley GP; up to 6 weeks rehab	0845 092 0414
	Rapid Response Team	3b	Reablement	>18 years; Surrey resident; MDT	01737 768511 x6029
	Horsham Hospital	3b	Community Hospital	Inpatient elderly; Horsham residents	01403 227000 x7246 / Blp 404
	Horsham Intermediate Care Team (CHAPS)	3b	ICT Home	>18 years; Horsham GP; up to 6 weeks rehab	0845 092 0414
	Dorking Hospital	3b	Community Hospital/ICT bed-based	>18 years; inpatient - neuro & elderly; Mid Surrey GP	01306 646258/9
	Dorking Integrated Rehabilitation Service	3b	ICT Home	>18 years; Dorking GP; up to 6 weeks rehab	01306 646283
	Leatherhead Hospital	3b	Community Hospital/ICT bed-based	Inpatient rehab; >18 years; Mid Surrey GP	01372 384384

	Integrated Rehabilitation Service (IRIS)	3b	ICT Home		07968 388553/01372 384310	
	Moseley Rehabilitation Hospital	3b	Community Hospital	Inpatient rehab; >18 years; Mid Surrey GP	0208 941 4481	
	Harrowlands Neuro Rehab Centre	3a	Local neuro rehab		01306 657900	
	Epsom Hospital		DGH	Acute Trust	01372 735735	
	Ashstead Hospital		*Private Hospital*	57 rooms; 2 bed HDU; predominantly surgical caseload	01372 276161	
	East Elmbridge & Mid Surrey Community Teams	3a/3b	Community	Domicillary physio; Neurorehab; Mid Surrey GP	01372 201700	
	New Epsom & Ewell Community Hospital (NEECH)	3b	Community Hospital	Inpatient rehab; >18 years; Mid Surrey PCT	01372 734834	
	Sussex Rehabilitation Unit (Brighton Gen. Hospital)	1	Regional Amputee Service	Inpatient & outpatient amputee rehab + limb fitting centre	01273 242160	
NW Surrey						
	Frimley Park Hospital		Trauma unit	Acute Trust	01276 604604	
	Surrey Social Services OT	3a	Social services	OT assessment for major adaptations & long term needs	01276 800205	
	Royal Surrey Hospital		Trauma unit	Acute Trust	01483 571122	
	Bradley Unit	1	Regional neurorehab unit	12 bedded unit; TBI & complex neurorehab	01483 846344	
	Godwin Unit (Haslemere)	3a	Intermediate care	Slower stream rehab incl. Stroke rehab beds	01483 782323	
	Farnham Community Hospital	3b	Community Hospital & Day Hospital	Inpatient beds - Elderly, Stroke; Falls service	01483 782000	
	Hazelmere & District Community Hospital		Community Hospital		01483 782000	
	Holy Cross					
	Mole Valley ICT	3b			07968 833553	
	Pinehurst (Camberley)	3b	ICT bed-based	ICT bed (up to 6 weeks rehab)		
	Redwood (Guildford)	3b	ICT bed-based	ICT bed (assessment for complex cases re. long term mx)		
	Woking Community Hospital	3a/3b	Community Hospital	48 beds (2 wards); stroke, #NOF, elderly, illness or disability	01483 715911	
	CARS (Community Assessment & Rehabilitation) - Milford Hospital	3b	Intermediate care & Community	ICT home (up to 6 weeks rehab & up to 3 daily visits); Community PT/OT	01483 782644	
	RSCH - CARS team	3b	ICT Home		01483 782534 (ICT)	
	Community Rehabilitation Teams	3a/3b	Community	MDT; neuro, complex physical disabilities +/- learning disability,	01483 846361	

	Oxted Community Teams		Community		01883 733890
	ARC (Assisted Rehabilitation in the Community)	3b	Reablement	up to 6 weeks ADL reablement	
	British Red Cross Home from Hospital Service	3b	Reablement	assistance with domestic tasks	01483 575938
	START (short term assessment & reablement)	3b	Social services	6 week assessment for long term needs	
	STAT (short term assessment team)	3b	Social services	2 week assessment for long term needs	
	Frimley CTPLD	3a	Community	Learning disabilities	01483 782940
	St. Peter's Hospital		Trauma unit	Acute Trust	01932 722000
	Ashford Hospital		DGH	Acute Trust	
	Walton Community Hospital - Rapid Access Centre	3b	Community	elderly; MDT assessment - prevent admissions	01932 414205
	Walton Community Hospital	3a/3b	Community Hospital	64 beds (3 wards); stroke, #NOF, elderly, illness or disability	01932 414205
	Intermediate Care Service	3b	ICT Home	>18 years; NW Surrey GP; transfer independently	01932 872929
	Intermediate Care Team Falls Service	3a	Community	MDT falls assessment	01932 722237
	St. Peter's - CARS team	3b	ICT Home		01932 722606 (ICT)
	Bournewood Community & Mental Health NHS Trust	3a/3b	Community	Community & outpatient services; NW Surrey GP	01932 872010
	Wheelchair Service	3a	Regional wheelchair service		01932 723560
	Woking Counselling Service	3a	Community	Mild to mod. emotional, psychological distress incl. PTS	01932 826067/01483 846206
Spinal Cord Injury Units	SCIU Single point of access				0844 8921915
	Royal National Orthopaedic Hospital, Stanmore	1	Regional SCIU	Accept patients with +/- surgical fixation	0208 954 2300 (switchboard)
	Stoke Mandeville	1	Regional SCIU	Accept patients with +/- surgical fixation	01296 315924 (switchboard)
	Salisbury	1	Regional SCIU	Accept patients post surgical fixation	01722 336262
Head Injury Units	Royal Hospital for Neuro-Disability (Putney)	1	National brain injury unit	Inpatient & outpatient services; supported living units; locked facilities	0208 780 4500
	Blackheath Rehabilitation Centre	1	Regional brain injury unit	Severe behavioural brain injuries - locked	

				facility		
	Banstead Place (Queen Elizabeth's Foundation)	1	National brain injury unit	>16 years; rehab centre for traumatic brain injury	01737 356222	
Mental Health	Springfield Hospital	2	Mental health unit	inpatient & outpatient services	0208 682 5873	
	Joan Bicknell Centre	2				
	Merton Home Treatment Team				0208 682 6158	
	Sutton CMHT				0208 254 8060	
	Ridgewood Centre	2			01276 605316	
	Cedar House	2			01276 605397	
	Well Being Centre	2			01276 670911	
	Sycamore House	2			01276 671102	
Charities	Headway					
	Spinal Injuries Association					