B12/S/a

2013/14 NHS STANDARD CONTRACT
FOR CANCER: SOFT TISSUE SARCOMA (ADULT)

SECTION B PART 1 - SERVICE SPECIFICATIONS

Service Specification No.	B12/S/a
Service	Cancer: Soft Tissue Sarcoma (Adult)
Commissioner Lead	
Provider Lead	
Period	12 months
Date of Review	

1. Population Needs

1.1 National/local context and evidence base

Sarcomas (bone and soft tissue) are relatively rare and can occur almost anywhere in the body, resulting in a wide variety of possible presentations. Although there are a number of important areas of care that are common to all these tumours, the management of patients with bone and soft tissue tumours involve different pathways. The national model asked for sarcoma centres with specialist multidisciplinary teams to be established serving a population within a defined sarcoma supra-network. Each sarcoma multidisciplinary team will provide a Chair for the supra-network Sarcoma Advisory Group (SAG).

The SAG should be recognised as:

- The primary source of clinical opinion on the tumour types dealt with by the SAG for the networks associated with that SAG for those tumour types;
- The group to whom those networks delegate corporate responsibility for those tumour types for co-ordination and consistency across the networks on cancer policy, patient pathways, practice guidelines, audit, research and service improvement;
- The group consulting with the relevant 'cross cutting' groups of those networks on issues regarding the SAG's tumour types, involving chemotherapy, radiotherapy, cancer imaging, histopathology, laboratory

investigation and specialist palliative care;

- A soft tissue sarcoma (STS) multidisciplinary team should meet minimum criteria and manage the care of at least 100 new patients with soft tissue sarcoma per year. If a sarcoma multidisciplinary team manages the care of patients with both bone sarcoma and soft tissue sarcoma, it needs to manage the care of at least 50 new patients with bone sarcoma per year and at least 100 new patients with soft tissue sarcoma per year. It is expected that soft tissue sarcoma and bone sarcoma services develop an integrated approach to ensure patients receive timely and effective treatment;
- This specification focuses on the soft tissue sarcoma service and the bone sarcoma service which is not already covered by the Primary Malignant Bone Tumour service (PMBT) – see PMBT service specification. Children with soft tissue sarcomas are treated within paediatric cancer services but these teams may wish to consult with network sarcoma MDT where appropriate.

Soft tissues sarcoma

Five-year survival is between 50% and 60% for soft tissue sarcomas as a group; however there is wide variation depending on anatomical site and histological features of the tumours (including gastrointestinal stromal tumour (GIST).

The prognosis for patients with limb and trunk soft tissue sarcoma is based on five factors:

- The patient's age,
- The presence of metastases at the time of presentation,
- The size of the tumour,
- Its depth and
- Histopathological grade.

Delays in diagnosis for soft tissue sarcoma are common. The diagnosis is often not suspected before biopsy or excision. Many soft tissue sarcoma are discovered incidentally following excision of a lump, with no prior suspicion that it could be a sarcoma. Very often this initial excision is inadequate and further treatment is required. The treatment of soft tissue sarcoma is largely surgical excision of the tumour with an adequate margin of normal tissue around it. Radiotherapy and chemotherapy are also used to treat soft tissue sarcoma.

Soft tissue sarcomas account for about 1% of all malignant tumours. Benign soft tissue tumours outnumber malignant by at least a factor of 10. Soft tissue sarcoma can occur anywhere that connective tissue is present and the signs and symptoms vary greatly depending on the anatomic site, as do the treatment options and prognosis. Soft tissue sarcomas increase in frequency with age.

In their early stages, soft-tissue sarcomas usually do not cause symptoms. Because soft tissue is relatively elastic, tumours can grow rather large, pushing aside normal tissue, before they are felt or cause any problems. The first noticeable symptom is usually a painless lump or swelling. As the tumour grows, it may cause other symptoms, such as pain or soreness, as it presses against nearby nerves and muscles. If in the abdomen it can cause abdominal pains commonly mistaken for menstrual cramps, indigestion, or cause constipation.

The following are some anatomical sites where soft tissue sarcoma can occur:

Extremity and superficial trunk sarcomas are the most common site for soft tissue sarcomas and make up 60% of all adult cases. Patients present with a lump which is usually painless. It can be difficult to differentiate a benign from a malignant mass, but urgent referral guidelines have been produced by NICE to identify patients more likely to have a malignant tumour. Patients usually present with painless lumps.

Retroperitoneal sarcomas usually present with an abdominal mass, with half reporting pain at presentation. Patients can present with a large tumour due to the space available in the retroperitoneum for the tumour to grow and often require complex surgical intervention.

- Viscera sarcomas present with signs and symptoms particular to the organ of origin. For example, GIST can present as upper abdominal pain in 40–50% of cases.
- Sarcomas of the uterus often present with painless vaginal bleeding as occurs with other uterine malignancies.
- Head and neck sarcomas can arise from bone, cartilage or the soft tissues of the head and neck. They can present as a lump, with problems relating to compression of the surrounding anatomy such as the orbit or pharynx. Surgery and radiotherapy are difficult because of the proximity of important anatomy in this area.
- Soft tissue sarcomas can occasionally arise in other sites including the viscera and central nervous system.

Fibromatosis is a benign but infiltrative and destructive condition that simulates soft tissue sarcoma in its physical signs and site of origin, and often in its rate of growth. Histological differentiation is crucial. Treatment is multimodal and this rare condition is within the remit of a sarcoma multidisciplinary team.

Bone tumours

This specification covers the oncological care of patients with malignant and non malignant bone tumours. These are rare with an overall incidence around10 new cases per year per million total population. The most common tumours are osteosarcoma (3 per million), chondrosarcoma (2 per million) and Ewing's sarcoma (1.5 per million). The remainder are a variety of other sarcomas and benign tumours.

Evidence base: This specification draws its evidence and rationale from a range of documents and reviews as listed below:

- Cancer Commissioning Guidance. Department of Health (2008)
- Improving Outcomes (IOG) in Sarcoma Cancers. Department of Health
- (2006)
- Manual for Cancer Services Sarcoma Measures Department of Health
- (August 2011)
- Manual for Cancer Services Acute Oncology Measures Department of
- Health (April 2011)

2. Scope

2.1 Aims and objectives of service

Aims of service

The overall aim of the service is to improve outcomes and provide the highest quality of care to people with sarcomas and for aspects of oncological care for patients with bone sarcomas.

The sarcoma centre specialist soft tissue multidisciplinary team service will provide assessment, diagnosis and treatment including surgical management, oncology and radiotherapy.

The agreed oncological service for bone tumours will work with the bone sarcoma multidisciplinary team in providing co-ordinated care across the pathway.

These services will be delivered in line with Improving Outcome Guidance for People with Sarcoma (2006) and Cancer Waiting Times. The sarcoma centre service will manage the care of at least 100 new patients of soft tissue sarcoma per year and if combined with a bone sarcoma multidisciplinary team, at least 50 new cases of bone sarcoma.

Objectives

- To provide a comprehensive service for all eligible referred patients with sarcoma that is delivered in line with the Improving Outcomes Guidance and Cancer Waiting Times.
- To provide expert diagnosis of soft tissue sarcoma cancer utilising the most up-to-date validated diagnostic tools and knowledge and improve

accuracy of diagnosis and staging.

- To work collaborative with potential referrers to increase early diagnosis of these tumours.
- To provide expert care and management of all patients with confirmed soft tissue sarcomas (except children with certain soft tissue sarcomas) through the use of the most up-to-date network agreed clinical oncological protocols and where appropriate surgical management.
- To work collaboratively with the bone sarcoma multidisciplinary team and service to provide specified care and management of patients with bone sarcomas through the use of the most up-to-date network agreed treatment protocols.
- For all sarcomas to consider and where agreed with the specialised sarcoma centre to provide chemotherapy, radiotherapy or surgery in line with national guidelines, evidence based practice and network policy and treatment pathways.
- Effective monitoring of patients to ensure optimal functioning and quality of life for the patient with regards to their soft tissue sarcoma or bone cancers.
- To support local healthcare providers to manage patients with sarcomas whenever it is safe to do so and clinically appropriate.
- Provide high quality information for patients, families and carers in appropriate and accessible formats and mediums.
- To ensure that there is involvement of service users and carers in service development and review
- To ensure there is a commitment to continual service improvement.
- To be compliant with Peer Review Cancer Measures.
- To ensure compliance with Care Quality Commission regulations.

2.2 Service description/care pathway

The care pathway for soft tissue sarcomas is different to that for bone sarcomas.

Soft tissue sarcoma

The soft tissue sarcoma model has a number of elements as it needs to cover the different types of soft tissue sarcoma that occur and the different ways these can present particularly as not all of these sarcomas can be identified prior to surgery.

The model specifies that the sarcoma centre with its specialist sarcoma multidisciplinary team teams has a role in diagnosis and treatment of all patients with lumps suspicious of a sarcoma and in treating patients with sarcomas diagnosed in all other parts of the body referred to the service including the treatment of some

very rare sarcomas. The sarcoma centre also has a role in developing referral and treatment guidelines, which will need to be agreed with all services that may treat patients with sarcoma. This includes agreement across the whole referral area on the guidelines for referral and treatment of sarcomas classed as “special types” within the improving outcome guidance where treatment planning and possibly delivery is shared between the local site specific multidisciplinary team and the centre multidisciplinary team.

Sarcoma treatment centres provide diagnostic assessment and treatment in either of the following models, agreed with the relevant Area Team(s):

- Soft tissue sarcoma specialist multidisciplinary team (treats min. 100 soft tissue sarcoma per year), or
- Bone and soft tissue sarcoma multidisciplinary team (treats min. 100 soft tissue sarcoma and 50 PMBT per year).

The sarcoma treatment centres will be supported by new patient clinics, diagnostic clinics for suspicious lumps, specialist surgery, oncology and radiotherapy services and have specialist palliative care input into the multidisciplinary team.

A sequential flow diagram of the integrated service user pathway(s) showing access, transfer and exit points, potential routes and relationships with other health and/or social care providers.

The service aims to deliver high quality clinical care to patients with soft tissue sarcoma tumours. In addition, it provides the surgical treatment of patients with diagnosed soft tissue sarcoma tumours. Radiological and pathological staging and discussion at multidisciplinary team is essential to plan subsequent treatment. A biopsy is usually required and must be performed by the soft tissue sarcoma specialist multidisciplinary team.

Patients can be referred from primary care, emergency departments and secondary care. To avoid delay in making the diagnosis, appropriate radiological investigations are usually performed by the designated provider. Following biopsy, the case is discussed at the specialist multidisciplinary team.

The sarcoma centre soft tissue sarcoma multidisciplinary team service aims to provide:

- High quality holistic care delivered through a multi-disciplinary team including: specialist sarcoma surgeon, specialist sarcoma radiologist, specialist sarcoma pathologist, medical oncologist and/or clinical oncologist, sarcoma clinical nurse specialist/key worker, support staff and palliative care specialist.
- Imaging and pathological facilities to classify and stage the condition prior to planning treatment.
- To advise and undertake investigations to proceed to surgical treatment

options as clinically indicated.

- High quality surgical treatment of patients with soft tissue sarcoma tumours.
- Long term surveillance after definitive treatment.
- Continuous monitoring of risk and governance to ensure that clinical treatment is safe and effective.
- Clinical and service audits to ensure highest standards of safety, care and clinical effectiveness against local and national guidelines.

The soft tissue sarcoma specialist multidisciplinary team service is likely to serve a population of at least 2-3 million people. The sarcoma centre service is required to agree the following areas with the relevant commissioners:

- Service configuration and population coverage
- Develop and agree referral criteria, clinical protocols, network policies and treatment pathways
- Actively engage and participate with the local network groups for soft tissue sarcoma tumours
- Actively engage and participate in peer review for soft tissue sarcoma tumours

The sarcoma centre soft tissue sarcoma specialist multidisciplinary team will be expected to play a key role in developing and supporting the work programme for "Sarcoma Advisory Group" or designated group covering the populations within the catchment area of the sarcoma multidisciplinary team.

The providers core specialist multi-disciplinary team shall include:

- Specialist sarcoma surgeon
- Specialist sarcoma radiologist
- Specialist sarcoma pathologist
- Medical oncologist and/or clinical oncologist
- Sarcoma clinical nurse specialist/key worker
- Support staff
- Palliative care specialist

In addition to this the service calls on the work of:

- Specialist sarcoma physiotherapist
- Specialised allied health professionals (AHP)
- Paediatric oncologist

- Specialist nurse(s)
- Affiliated medical or clinical oncologist from linked cancer centre
- Affiliated diagnostic service clinicians
- Other professionals including orthopaedic, thoracic, plastic, head and neck, gynaecological, gastrointestinal and vascular surgeons

The soft tissue sarcoma centre specialist multidisciplinary team service will deliver the service in line with the following:

- The surgical team liaise with the oncologists to plan treatment as required per agreed local network treatment protocols. Individuals work together with the same aims and clinical understanding of the condition and its management to create a multi-disciplinary team approach. The team will ensure that:
  - All patients are discussed at the multidisciplinary team
  - All treatment and surgery is carried out by the specialist centre agreed by the network.
- Inpatients are reviewed daily on a ward round supported by a specialist sarcoma surgeon and oncological surgeon with input from the core multidisciplinary team as clinically required. Care plans are clearly documented in the notes. Relevant investigations will be carried out. Any referred patients that are waiting for admission are discussed and the plan to admit them as soon as possible is reviewed with any actions required updated.
- There is a weekly multidisciplinary team (MDT) led by the specialist sarcoma clinical lead to discuss the needs of each newly referred patient (and other patients as required) in detail and review all other aspects of their care.
- The providers will hold other meetings regularly throughout the month to address clinical, service delivery and governance issues.
- Ensure there are agreed network clinical protocols for the oncological treatment of patients with soft tissue sarcoma cancers.
- Audit as an integral part of improving the delivery of care and an on-going audit programme provides the evidence to improve and enhance the delivery of the clinical care provided.
- Actively recruit to national clinical trials.

Local soft tissue diagnostic service: Commissioners can agree that a diagnostic clinic can be hosted for specified types of soft tissue sarcoma (linked to sarcoma treatment centres), either by:

- Patients with a suspected diagnosis of soft tissue sarcoma (as defined by the urgent referral criteria) would be seen within two weeks at a diagnostic clinic that is part of a sarcoma treatment centre; or

- Patients with a suspected diagnosis of soft tissue sarcoma (as defined by the urgent referral criteria) would be seen within two weeks at a diagnostic clinic specifically designated by their local commissioners This would be a purely diagnostic, rather than a treatment clinic, and would be clearly affiliated to one sarcoma multidisciplinary team.

The designated diagnostic clinics should undertake triple assessment including clinical assessment, imaging and where agreed biopsy of all patients. There would be no requirement for a surgeon or oncologist to be part of such a team, but the members of the diagnostic team should be trained by and work in close collaboration with members of the affiliated sarcoma multidisciplinary team. Patients identified as having a soft tissue sarcoma should be rapidly referred on to a sarcoma network multidisciplinary team for definitive treatment, as would any cases with equivocal images or biopsy.

A diagnostic clinic separate from a sarcoma treatment centre should have its staff trained and its work audited by the sarcoma multidisciplinary team from the sarcoma treatment centre to which it is affiliated. The local commissioners would agree the configuration of local diagnostic services and referral protocols. It is recognised that the majority of patients seen are likely to have benign conditions.

All patients with a provisional histological and/or radiological diagnosis of bone or soft tissue sarcoma should have their diagnosis reviewed by a specialist sarcoma pathologist and/or radiologist who are part of a sarcoma multidisciplinary team. In the case that patients has a probable bone sarcoma (usually following X-ray examination) they should be referred directly to a bone tumour treatment centre for diagnosis and management.

Treatment - Treatment recommendations (surgery, chemotherapy, radiotherapy) for all patients with limb, limb girdle and truncal soft tissue sarcoma should be decided by the constituted sarcoma multidisciplinary team. All patients with limb, limb girdle and truncal soft tissue sarcoma should undergo definitive surgical resection by a member of a sarcoma multidisciplinary team or by a surgeon with tumour site-specific or age-appropriate skills, in consultation with the sarcoma multidisciplinary team. The sarcoma multidisciplinary team will also treat patients with soft tissue sarcomas in other body sites and will decide and deliver the treatment plan. All soft tissue sarcoma should undergo definitive surgical resection by a member of a sarcoma multidisciplinary team or by a surgeon with tumour site-specific or age-appropriate skills, in consultation with the sarcoma multidisciplinary team.

Commissioners should ensure that each area either host a sarcoma multidisciplinary team or agree to use the services of a nearby sarcoma multidisciplinary team to provide all treatment facilities or have a nominated medical and/or clinical oncologist who is a member of the extended sarcoma multidisciplinary team and who agrees to give curative and palliative treatments (chemotherapy or radiotherapy) according to protocols defined by the sarcoma network multidisciplinary team.

Retro-peritoneal sarcomas

The NICE improving outcome guidance identifies the particular issues in diagnosing and undertaking complex surgery on retroperitoneal sarcomas, which often requires two surgeons to be present. The surgical management of retroperitoneal sarcomas will only be within named sarcoma centres and not all sarcoma centres may be required to offer such a service. The named service should ensure the surgeons undertaking such cases do this as part of a regular clinical commitment. Given the rarity of these tumours the organisation of the service should be supra-network to facilitate maximising the numbers of patients treated by each member of the surgical team. The supra-network should have a policy in place to support obtaining second opinions when necessary.

Soft tissue sarcomas requiring shared management

The care of patients with soft tissue sarcomas requiring shared management will be managed by the appropriate site-specific multidisciplinary team, in conjunction with a sarcoma multidisciplinary team.

The site-specific multidisciplinary team has primary responsibility to liaise with the sarcoma multidisciplinary team to discuss the management of each patient.

Site-specific and sarcoma multidisciplinary team teams need to ensure that clear pathways exist between the two multidisciplinary team teams, to have common treatment pathways and to clarify under what circumstances patient care will be transferred from one team to the other.

The medical management of patients with GIST will be supervised by cancer specialists with experience in the management of patients with GIST.

Dietetic support will be available for patients who have undergone major abdominal surgery (see the NICE guidance on nutritional support in adults).

Surgery for non-rhabdomyosarcoma soft tissue sarcomas in teenagers and young adults will only be carried out in an age appropriate service with a surgeon with appropriate expertise.

Chemotherapy and radiotherapy - Chemotherapy and radiotherapy are important components of the treatment of some patients and should be carried out at designated centres by appropriate specialists as recommended by a sarcoma multidisciplinary team. There should be a formal relationship between the soft tissue sarcoma multidisciplinary team and the provider of non-surgical oncology services that is characterised by agreed network protocols, good communication, and well-defined referral pathways. This relationship should be defined in writing and approved by the local network director and the lead clinician in the soft tissue sarcoma multidisciplinary team. Audits of compliance with these protocols will need to be demonstrated.

The provider of chemotherapy and radiotherapy services will:

- Provide the facilities for intensive inpatient chemotherapy and radiotherapy as described in the manual for cancer services.
- Be either
  - At a soft tissue sarcoma treatment centre; or
  - At a centre with a nominated medical and/or clinical oncologist who is a member of an extended sarcoma multidisciplinary team and who agrees to give curative and palliative treatments (chemotherapy or radiotherapy) according to protocols defined by the sarcoma multidisciplinary team. These oncologists should be nominated by the network clinical director and approved by the lead clinician on the sarcoma multidisciplinary team; or
  - At a principal treatment centre for children or young people as described in the nice guidance on improving outcomes in children and young people with cancer
- Offer all patients with soft tissue sarcomas entry into the relevant clinical trials.

Bone sarcoma

The diagnosis and surgical treatment of patients with bone sarcoma falls within a separate arrangement so the referral for oncological treatment will usually be from the designated bone sarcoma centre to the agreed local chemotherapy and radiotherapy provider.

The Bone Sarcoma core multi-disciplinary (multidisciplinary team) includes:

- Orthopaedic and oncological surgeons
- Radiologists
- Pathologists
- Medical oncologists
- Clinical oncologists
- Paediatric Oncologist
- Nurses

In addition to this the service calls on the work of:

- Specialist sarcoma physiotherapist
- Specialised allied health professionals (AHP)
- Paediatric oncologist

- Specialist nurse(s)
- Affiliated medical or clinical oncologist from linked cancer centre
- Affiliated diagnostic service clinicians
- Other professionals including orthopaedic, thoracic, plastic, head and neck, gynaecological, gastrointestinal and vascular surgeons

Chemotherapy and radiotherapy - Chemotherapy and radiotherapy are important components of the treatment of some patients with bone sarcomas and should be carried out at designated centres by appropriate specialists as recommended by a sarcoma multidisciplinary team. There should be a formal relationship between the provider of non-surgical oncology services and the bone sarcoma multidisciplinary team and that is characterised by agreed network protocols, good communication, and well-defined referral pathways. This relationship should be defined in writing and approved in line with cancer measurers and with the bone sarcoma multidisciplinary team. Audits of compliance with these protocols will need to be demonstrated.

The provider of chemotherapy and radiotherapy services should:

- Provide the facilities for intensive inpatient chemotherapy and radiotherapy as described in the “Manual for cancer services,
- Be **either**
  - At a sarcoma treatment centre; or
  - At a centre with a nominated medical and/or clinical oncologist who is a member of an extended sarcoma multidisciplinary team and who agrees to give curative and palliative treatments (chemotherapy or radiotherapy) according to protocols defined by the sarcoma multidisciplinary team. These oncologists should be nominated by the host network clinical director and approved by the lead clinician on the sarcoma multidisciplinary team; or
  - At a principal treatment centre for children or young people as described in the NICE guidance on „Improving outcomes in children and young people with cancer
- Offer all patients with soft tissue sarcomas entry into the relevant clinical trials.
- The sarcoma multidisciplinary team should recommend the treatment regimen.

All Sarcoma services

Pathology

All soft tissue sarcomas will either be first reported or reviewed by a Specialist Sarcoma Pathologist (SSP- soft tissue). An SSP-soft tissue is a pathologist who regularly reports soft tissue tumours and these form a significant component of their workload. They will participate in the soft tissue part of the bone and soft tissue pathology “External Quality Assessment” (EQA) scheme and be part of a properly constituted sarcoma multidisciplinary team.

All bone sarcomas will either be first reported or reviewed by an SSP. An SSP is a pathologist who regularly reports bone sarcoma tumours and these form a significant component of their workload. They will participate in the bone tissue pathology EQA scheme and be part of a properly constituted sarcoma multidisciplinary team.

All gastrointestinal stromal tumours (GISTs) will be reported or reviewed by an SSP with experience in GIST who successfully participates in the bone and soft tissue pathology EQA scheme, or a tertiary gastrointestinal specialist who successfully participates in the gastrointestinal pathology EQA scheme.

All patients with soft tissue tumours assessed in a diagnostic clinic will have their pathology reported by: either an SSP-soft tissue or a pathologist nominated by the sarcoma multidisciplinary team as part of the local diagnostic referral pathway who has formal links to an SSP

All malignant soft tissue tumours will be reviewed by an SSP-soft tissue prior to management recommendations by the sarcoma multi-disciplinary team.

There will be at least conditional “Clinical Pathology Accreditation UK” approval for the laboratory in which the SSP and those with a specialist interest work.

There will be formal documented audit of the work of the SSPs and the nominated pathologists.

The SSPs will have ready access to molecular pathology and/or cytogenetics facilities.

All pathology laboratories in centres treating sarcomas will store tissue in appropriate facilities for research (subject to the provisions of the Human Tissue Act).

Support and follow-up

Access to cancer genetic services should be offered to the patient and their family, where appropriate.

The chest x-rays and clinical examinations will be provided at regular intervals.

Long-term follow-up will be expected for those patients who have received a prosthetic replacement.

There will be regular imaging of patients at high risk of recurrence.

Discharge criteria from inpatient care:

- No further investigation required
- No adverse outcomes anticipated
- Patient is safe post surgical excision and reconstruction

- Clinically appropriate arrangements for local care and soft tissue sarcoma service follow-up have been discussed and agreed by all relevant parties
- Parents / carers have demonstrated competence in any care they will be required to provide in relation to soft tissue sarcoma
- Parents / carers understand and have the necessary information to contact their soft tissue sarcoma specialist multidisciplinary team provider

All discharge planning will be managed by the multidisciplinary teams and oncological surgeons in charge of the case with local health and social care providers being fully informed of the patient's condition and any responsibilities they will have to assume. This will be formalised in written communication to the patient's GP and all other relevant parties.

Palliative Care

The provider shall give high quality supportive and palliative care in line with NICE guidance. The extended team for the multidisciplinary team includes additional specialists to achieve this requirement. Patients who are managed by a malignant sarcoma multidisciplinary team will be allocated a key worker.

- Palliative care and symptom control should be central to any management plan.
- Specialist palliative care including specific interventions are important to provide symptom relief in specific patient groups.
- Patients who require palliative care will be referred to a palliative care team in the hospital and the team will be involved early to liaise directly with the community services.
- All patients will be allocated a key worker who will usually be a clinical nurse specialist with expertise and experience in lung cancer and mesothelioma. Patients will be provided with their key worker's name and contact details.
- Specialist palliative care advice will be available on a 24 hour, seven days a week basis.

Rehabilitation

It is important that patients are supported from diagnosis through the entire pathway with appropriate rehabilitation support. The rehabilitation care pathways provide a model for this support and cover the acute, community and primary care settings. There should be appropriate assessment of patients' rehabilitative needs across the pathway and the provider must ensure that high quality rehabilitation is provided in line with the network agreed lung rehab pathway at: www.ncat.nhs.uk/our-work/living-with-beyond-cancer/cancer-rehabilitation

Sarcoma surgery will involve surgery on a variety of organs and hence have short and long term impact on patients in different ways depending on the site and

complexity of the surgery undertaken. For these reasons good access to rehabilitation services and supportive care are particularly relevant to sarcoma patients.

Physiotherapy, occupational therapy and rehabilitation

- A specialist sarcoma physiotherapist and other specialised AHPs will be members of the extended sarcoma multidisciplinary team
- Ongoing rehabilitation and supportive care will be provided locally wherever possible. This will be co-ordinated by the therapist in liaison with the key worker.
- Patients with functional disabilities as a consequence of their sarcoma should have timely access to appropriate support and rehabilitation services.

Supportive care

Each patient should be offered an holistic needs assessment at key points in their cancer pathway including at the end of primary treatment and the beginning of the end of life. A formal care plan should be developed. The nurse specialist(s) should ensure the results of patients' holistic needs assessment are taken into account in the multidisciplinary team decision making.

Survivorship

The National Cancer Survivorship Initiative (NCSI) is testing new models of care aimed at improving the health and well being of cancer survivors. The new model stratifies patients on the basis of need including a shift towards supported self management where appropriate. In some circumstances traditional outpatient follow- up may be replaced by remote monitoring. The model also incorporates care coordination through a treatment summary and written plan of care.

It will be important for commissioners to ensure that work from this programme is included and developed locally to support patients whose care will return to their more local health providers once specialist care is no longer required.

End of life care

The sarcoma service should have clear pathways agreed for patient care at the end of life. This will include services within hospitals, community services and services in the voluntary sector. The provider should provide end of life care in line with NICE guidance and in particular the markers of high quality care set out in the NICE quality standard for end of life care for adults.

Acute oncology service

All hospitals with an Accident and Emergency (A&E) department should have an "acute oncology service" (AOS), bringing together relevant staff from A&E, general medicine, haematology and clinical/medical oncology, oncology nursing and oncology pharmacy. This will provide emergency care not only for cancer patients who develop complications following chemotherapy, but also for patients admitted suffering from the consequences of their cancer. For full details on AOS please refer to the service specification for chemotherapy referred to above.

Strategic Clinical Networks

A new type of network called strategic clinical networks will be in place from April 2013 located in 12 areas across England. They will be established in areas of major healthcare challenge where a whole system, integrated approach is needed to achieve a real change in quality and outcomes of care for patients. Cancer has been identified as one of the conditions that will be within this new framework. Strategic clinical networks will help commissioners reduce unwarranted variation in services and will encourage innovation. They will use the NHS single change model as the framework for their improvement activities.

2.3 Population covered

The soft tissue sarcoma referral pathway is detailed below:

Suspicious lumps on the limbs, and trunk wall

- Referral criteria: For these soft tissue sarcomas the principal problem in diagnosis is the large number of benign soft tissue tumours that cannot reliably be distinguished from malignant tumours (sarcomas) using clinical judgement. NICE referral guidelines for suspected cancer outlines the following features are suggestive of malignancy in a lump include:
  - Lump >5cm
  - Lump increasing in size
  - Lump deep to the fascia
  - Pain.
- The pathways for patients who present with lumps fitting the criteria on the limbs and trunk wall are as follows:
  - Anyone with a suspicious lump meeting the referral criteria will be referred to a specified diagnostic clinic.
  - The referral will be to the diagnostic clinic designated by each network for patients who meet the urgent referral criteria. This clinic will either be part of a sarcoma treatment centre or a specified diagnostic clinic established locally.

- The diagnostic clinics will undertake the agreed assessments including clinical assessment, imaging and only where agreed biopsy of patients.
- There would be no requirement for a surgeon or oncologist to be part of such a team, but the members of the diagnostic team will be trained by and work in close collaboration with members of the affiliated sarcoma multidisciplinary team. Patients identified as having a soft tissue sarcoma will be rapidly referred on to a sarcoma multidisciplinary team for definitive treatment, as would any cases with equivocal images or biopsy.
- Some patients with a soft tissue sarcoma will be diagnosed following excision of a lump thought to be benign but which turns out to be malignant. These patients will be referred directly to the sarcoma centre multidisciplinary team designated by commissioners
- Patients whose lump turns out to be benign will be referred locally for appropriate management.

- Referral of other types of sarcoma
  - Urgent (two-week) referral guidelines - Patients with symptoms outlined in agreed network referral guidelines should be referred to the soft tissue sarcoma specialist multidisciplinary team without delay.
  - The pathway for retroperitoneal and pelvic soft tissue sarcomas should be to a sarcoma treatment centre.
  - It is recognised that a number of site specific tumours subsequently confirmed as sarcomas are likely to be referred directly to the site specific multidisciplinary team and may require the majority of management within these teams. This may include gynaecological; chest wall, CNS, Gastro-Intestinal Stromal Tumours (GIST), head and neck, skin tumours and adult type tumours in children & young people.
  - All parties will be expected to work to the network wide agreed referral pathways for these specified tumours and apply the shared management guidelines. This will include agreement of management of patients in conjunction with the sarcoma centre multidisciplinary team and may include transfer of patients for management to the sarcoma centre multidisciplinary team.
- Fibromatosis
  - Patients with fibromatosis or other soft tissue tumours of borderline malignancy should be referred to a sarcoma multidisciplinary team for diagnosis and management.
  - Appropriate imaging facilities will be available to comply with national access standards (as defined in the NHS Cancer Plan and the Wales National Cancer Standards).

- Commissioners and Networks will work together to ensure that there are clear referral pathways from both primary and secondary care through to a designated diagnostic clinic and for patients with proven sarcomas on to the affiliated sarcoma treatment centre.
- An audit of all elements of the referral pathway will be carried out.

2.4 Any acceptance and exclusion criteria

The service outlined in this specification is for patients ordinarily resident in England; or otherwise the commissioning responsibility of the NHS in England.* This excludes patients who whilst resident in England, are registered with a GP practice in Wales, but includes patients resident in Wales who are registered with a GP Practice in England.

Soft Tissue Sarcoma: Patients may be referred to the sarcoma service multidisciplinary team by primary or secondary referrers where a cancer or a soft tissue sarcoma is suspected or the patient has a borderline malignancy or fibromatosis.

The soft tissue sarcoma specialist multidisciplinary team, unless it is part of a joint bone sarcoma centre, is not commissioned to provide treatment for the following bone sarcomas (including Osteosarcoma, Chondrosarcoma, Ewing's sarcoma, Giant Cell Tumour, Chordoma, Osteofibrous dysplasia and Adamantinoma).

Bone Sarcoma: The oncological treatment of primary bone tumours is included within this specification but not investigation and the surgical treatment of diagnosed malignant primary tumours of bone which are commissioned through the national contract for PMBT. As the diagnosis and surgical treatment of patients with bone sarcoma falls within a separate national arrangement referral for oncological treatment will usually be from the designated Bone sarcoma centre to the chemotherapy and radiotherapy providers. The treatment may be delivered through the agreed specialist sarcoma service or through other agreed local providers. The Bone tumour multidisciplinary team is commissioned to provide treatment which are outside the PBMT commissioned service and include confirmed benign primary bone tumours other than Giant Cell Tumour of bone, and tumours that do not show permeation classed as enchondromas or a typical enchondromas,.

2.5 Interdependencies with other services

Internally the soft tissue sarcoma Specialist multidisciplinary team will link into multiple clinical teams as a result of the composition of the broad multidisciplinary team.

External to this the soft tissue sarcoma Specialist multidisciplinary team providers are the leaders in the NHS for patient care in this area. They provide a direct

source of advice and support when other clinicians refer patients into the specialist multidisciplinary team. This support will continue until the patient is transferred into the specialist multidisciplinary team or it becomes apparent that the patient does not have a soft tissue sarcoma.

The soft tissue sarcoma specialist multidisciplinary team also provides education within the NHS to raise and maintain awareness of soft tissue sarcoma and its management. Members of the multidisciplinary team and associated services will need to support the work programme of the SAG which includes development of guidelines, for treatment and shared management, audit and increasing recruitment into clinical trials.

The soft tissue sarcoma specialist multidisciplinary team providers will form a relationship with local health and social care providers to help optimise any care for soft tissue sarcoma provided locally for the patient. This may include liaison with consultants, GPs, community nurses or social workers.

All referrals for children, teenagers and young adults must be discussed at the appropriate teenager and young adults (TYA) multidisciplinary team for decision on care planning and treatment with clear mechanisms for tracking. The PMBT multidisciplinary team must be integrated with a TYA Principle Treatment centre that meets the Improving Outcomes Guidelines for Teenagers & Young Adults (2011). The operational policy must have the working arrangements between the TYA multidisciplinary team and the sarcoma multidisciplinary teams described and agreed.

External to this the nationally designated PMBT providers are the leaders in the NHS for patient care in this area. They provide a direct source of advice and support when other clinicians refer patients into the nationally designated providers. This support will continue until the patient is transferred into the nationally designated provider or it becomes apparent that the patient does not have a PMBT.

The nationally designated providers also provide education within the NHS to raise and maintain awareness of PMBT and its management.

The national providers will form a relationship with local health and social care providers to help optimise any care for PMBT provided locally for the patient. This may include liaison with consultants, GPs, community nurses or social workers.

Relevant networks and screening programmes: The providers form part of the network site specific group for sarcoma within their sarcoma network and are expected to engage and participate with relevant network groups and peer review process.

3. Applicable Service Standards

3.1 Applicable national standards e.g.: NICE, Royal College

- Improving Outcomes (IOG) in Sarcoma Cancers. Department of Health (2006)
- Manual for Cancer Services Sarcoma Measures Department of Health (August 2011)
- Manual for Cancer Services Acute Oncology Measures Department of Health (April 2011)

4. Key Service Outcomes

Outcomes

- Accuracy of diagnosis and staging
- Adherence to agreed pathways
- Adherence to agreed shared protocols
- One and five year survival rates
- Local recurrence rates
- Quality of life and long-term adverse effects of treatment
- Patients' satisfaction with service and patient information

5. Location of Provider Premises

The service is delivered across England by designated centres and which provide cover across all regions in England for the national caseload. Sarcoma centre soft tissue sarcoma specialist multidisciplinary teams are the hospitals listed in appendix 1.

Appendix 1 – Sarcoma specialist multidisciplinary team provider list

Code	Trust
RXN	Lancashire Teaching Hospitals NHS Foundation Trust
RW3	Central Manchester University Hospitals NHS Foundation Trust
RBV	The Christie Hospital
RR8	Leeds Teaching Hospitals NHS Trust
RWA	Hull And East Yorkshire Hospitals NHS Trust
RHQ	Sheffield Teaching Hospitals NHS Foundation Trust
RT3	Royal Brompton And Harefield NHS Foundation Trust
RRV	University College London Hospitals NHS Foundation Trust
RVJ	North Bristol NHS Trust
RK9	Plymouth Hospitals NHS Trust
RH8	Royal Devon & Exeter
RA7	University Hospitals Bristol NHS Foundation Trust
RTH	Oxford University Hospitals
RTD	The Newcastle Upon Tyne Hospitals NHS Foundation Trust
RPY	The Royal Marsden NHS Foundation Trust
RQ6	Royal Liverpool And Broadgreen University Hospitals
RX1	Nottingham University Hospitals NHS Trust
RWE	University Hospitals Of Leicester NHS Trust
RRJ	Royal Orthopaedic Hospital, Birmingham
RAN	Royal National Orthopaedic Hospital, Stanmore
RL1	Robert Jones & Agnes Hunt Orthopaedic Hospital, Oswestry

Appendix 2: Performance Measurements:

i. *Quality*

Performance Indicator	***Indicator***	***Threshold***	***Method of Measurement***
Improving outcome guidance compliance	% of cases discussed at multidisciplinary team	100%	Reported within national audit reports but not reported regularly to Board
	Follow Up Ratios		Not regularly reported
	Other Quality Measures	TBC	TBC
	Percentage attendance by individual core members or their agreed cover at multidisciplinary team	67%	Reported in Peer Review Submissions
	Attendance at advanced communications course Links to specification point 3.1.10	100%	Peer Review
	Compliance with specified measures	Compliance with specific measures for tumour site as set out in improving outcome guidance documentation	Regular updates to Board and Network Performance Report
Compliance with Peer Review	Compliance with all other Peer Review measures (other than where agreed with commissioners when the Provider should have an action plan in place that has been agreed with the Commissioner	Minimum of 70%	National reports / Regular verbal feedback to Board

ii. Cancer Waiting Time Compliance

The provider should ensure that these targets are achieved for the part of the patient pathway that it delivers and that when the patient pathway crosses outside the locality border, appropriate scheduling of patients/activity supports achievement of the target by other providers in the pathway wherever possible, except when informed patient choice or clinical appropriateness mitigate against this.

Performance Indicator	***Indicator***	***Threshold***	***Method of Measurement***
	62 day wait - % treated in 62 days from GP referral, consultant referral and referral from screening program	>~86%	Regularly reported to Board
Aggregate Measures	14 day suspected cancer referral standard performance (A20)	93%	Regularly reported to Board
	31 day first treatment standard performance (A15)	96%	Regularly reported to Board
	31 day subsequent treatment (Drugs) standard performance (A16)	94%	Regularly reported to Board
	31 day subsequent treatment (Drugs) standard performance (A16)	98%	Regularly reported to Board
	31 day subsequent treatment (Radiotherapy) standard performance (A17)	94%	Live from 1st January 2011 and regularly reported to Board
	31 day subsequent treatment (Other Treatments) standard performance	TBC	Live from 1st January 2011 and regularly reported to Board
	31 day subsequent treatment (Palliative) standard performance	TBC	Live from 1st January 2011 and regularly reported to Board
	62 day standard from 14 day referral performance (A18)	85%	Regularly reported to Board
	62 day standard from consultant upgrade performance (A19)	90%	Regularly reported to Board

	62 day standard from 14 day referral performance (A18)	TBC	Live from December 2008 and regularly reported to Board
	Diagnostic Test Waiting Times	TBC	Not regularly reported to Board, no longer a national CQC target

Additional information

Coding of sarcomas is not straightforward. Sarcomas need to be identified using morphology codes. Any malignant tumour with a morphology code in this list is classified as a sarcoma:

Morphology	Description
8710	Glomangiosarcoma: Glomoid sarcoma
8711	Glomus tumour (nad varients), malignant glomus tumour
8713	Glomangiomyoma
8800	Sarcoma, NOS
8801	Spindle cell sarcoma
8802	Giant cell sarcoma (except of bone M9250/3); pleomorphic cell sarcoma
8803	Small cell sarcoma; round cell sarcoma
8804	Epithelioid sarcoma, epithelioid cell sarcoma
8805	Undifferentiated sarcoma
8806	Desmoplastic small round cell tumour
8810	Fibrosarcoma, NOS, sclerosing epitheliod fibrosarcoma
8811	Fibromyxosarcoma
8812	Periosteal fibrosarcoma (C40._, C41._); periosteal sarcoma, NOS (C40._, C41._)
8813	Fascial fibrosarcoma
8814	Infantile fibrosarcoma; congenital fibrosarcoma
8815	Solitary fibrous tumour, NOS
8821	Aggressive fibromatosis, Desmoid tumour NOS
8822	Abdominal fibromatosis (ICDO-2)
8823	Desmoplastic fibroma (ICD-O-2)
8824	Myofibromatosis (ICD-O3)
8825	Inflammatory myofibroblastic tumour, Myofibroblastic tumour, NOS
8830	Fibrous histiocytoma, malignant; fibroxanthoma, malignant
8832	Dermatofibrosarcoma, NOS (C44._); dermatofibrosarcoma protuberans, NOS (C44._)
8833	Pigmented dermatofibrosarcoma protuberans; Bednar tumour
8834	Giant cell fibroblastoma
8835	Plexiform fibrohistiocytic tumour
8836	Angiomatoid fibrous histiocytoma
8840	Myxosarcoma
8841	Angiomyxoma

8842	Ossifying fibromyxoid tumour, atypical
8850	Liposarcoma, NOS; fibroliposarcoma
8851	Liposarcoma, well differentiated; Liposarcoma, differentiated
8852	Myxoid Liposarcoma; myxoliposarcoma
8853	Round cell liposarcoma
8854	Pleomorphic liposarcoma
8855	Mixed liposarcoma
8857	Fibroblastic liposarcoma
8858	Dedifferentiated liposarcoma
8860	Angiomyoliposarcoma
8890	Leiomyosarcoma, NOS
8891	Epithelioid leiomyosarcoma
8894	Angiomyosarcoma
8895	Myosarcoma
8896	Myxoid leiomyosarcoma
8897	Smooth muscle tumour
8898	Metastising leiomyosarcoma
8900	Rhabdomyosarcoma, NOS; rhabdosarcoma
8901	Pleomorphic rhabdomyosarcoma
8902	Mixed type rhabdomyosarcoma
8910	Embryonal rhabdomyosarcoma; sarcoma botryoides; botryoid sarcoma
8912	Spindle cell rhabdomyosarcoma
8920	Alveolar rhabdomyosarcoma
8921	Rhabdomyosarcoma with ganglionic differentiation; Ectomesenchymoma
8930	Endometrial stromal sarcoma (C54.1)
8931	Endometrial stromal sarcoma, low grade
8935	Stromal Sarcoma
8936	Gastrointestinal stromal sarcoma
8963	Rhabdoid sarcoma
8964	Clear cell sarcoma of kidney
8982	Myoepithelioma
8990	Mesenchymoma, malignant; mixed mesenchymal sarcoma
8991	Embryonal sarcoma
9020	Phyllodes tumour, malignant (C50.) Cystosarcoma phyllodes, malignant (C50)
9040	Synovial sarcoma, NOS; synovioma, NOS; synovioma, malignant
9041	Synovial sarcoma, spindle cell
9042	Synovial sarcoma, epithelioid cell
9043	Synovial sarcoma, biphasic
9044	Clear cell sarcoma (except of kidney M8964/3)
9120	Haemangiosarcoma, Angiosarcoma of soft tissue
9130	Haemangioendothelioma, NOS, Kaposiform haemangioepithelioma
9133	Epithelioid haemangioendothelioma, malignant
9135	Endovascular papillary angioendothelioma
9136	Spindle cell hemangioendothelioma
9140	Kaposi sarcoma; Multiple haemorrhagic sarcoma

9150	Haemangiopericytoma, NOS
9170	Lymphangiosarcoma; lymphangioendothelial sarcoma
9174	Lymphangiomyomatosis
9180	Osteosarcoma, NOS (C40._, C41._)
9181	Chondroblastic osteosarcoma (C40._, C41._)
9182	Fibroblastic osteosarcoma (C40._, C41._); osteofibrosarcoma (C40._, C41._)
9183	Telangiectatic osteosarcoma (C40._, C41._)
9184	Osteosarcoma in Paget's disease of bone (C40._, C41._)
9185	Small cell osteosarcoma (C40._, C41._)
9186	Central osteosarcoma (C40._, C41._);
9187	Intraosseous well differentiated osteosarcoma (C40._, C41._)
9190	Juxtacortical osteosarcoma ICD-O-2
9192	Parosteal osteosarcoma (C40._, C41._)
9193	Periosteal osteogenic sarcoma (C40._, C41._)
9194	High grade surface osteosarcoma (C40._, C41._)
9195	Intracortical osteosarcoma (C40._, C41._)
9200	Aggressive osteoblastoma
9210	Osteochondromatosis
9220	Chondrosarcoma
9221	Juxtacortical chondrosarcoma (C40._, C41._)
9230	Chondroblastoma, malignant (C40._, C41._)
9231	Myxoid chondrosarcoma
9240	Mesenchymal chondrosarcoma
9242	Clear cell chondrosarcoma, (C40._, C41._)
9243	Dedifferentiated chondrosarcoma (C40._, C41._)
9250	Giant cell tumour of bone, NOS
9251	Giant cell tumour of soft parts, NOS
9252	Malignant tenosynovial giant cell tumour (C49._)
9260	Ewing's sarcoma, Ewing's tumour, Extraskeletal Ewing tumour
9261	Adamantinoma of long bones; tibial adamantinoma (C40.2)
9270	Odontogenic tumour
9290	Ameloblastic odontosarcoma: Ameloblastic fibrodentinosarcoma
9310	Ameloblastoma
9330	Ameloblastic fibrosarcoma: Ameloblastic sarcoma: Odontogenic fibrosarcoma
9341	Clear cell odontogenic tumour
9342	Odontogenic carcinomsarcoma
9364	Peripheral neuroectodermal tumour; neuroectodermal tumour, NOS
9365	Askin tumour
9370	Chordoma
9371	Chondroid chordoma
9372	Dedifferentiated chordoma
9373	Parachondroma
9473	Primitive neuroectodermal tumour
9540	Malignant peripheral nerve sheath tumour MPNST, NOS
9560	Malignant schwannoma; neurilemoma, malignant

9561	Malignant peripheral nerve sheath tumour with thabdomyoblastic differentiation
9571	Perineurioma, malignant; Perineural MPNST
9580	Granular cell tumour, malignant; granular cell myoblastoma, malignant
9581	Alveolar soft part sarcoma

Any identified sarcoma which is classified using the International Classification of Disease volume 10 (ICD10) as C40 or C41 is classified as a “bone sarcoma”, else it is classified as a “soft tissue sarcoma”. The following table shows how identified sarcomas are classified into groups using morphology codes.

Title	**Sub-sections**	**Description**	**Morphology code**
Leiomyosarcoma	None	Leiomyosarcoma, NOS	8890
		Epithelioid leiomyosarcoma	8891
		Myxoid leiomyosarcoma	8896
Liposarcomas	Liposarcoma NOS	Liposarcoma, NOS; fibroliposarcoma	8850
		Round cell liposarcoma	8853
		Mixed liposarcoma	8855
		Fibrolastic liposarcoma	8857
		Angiomyoliposarcoma	8858
	Well differentiated liposarcoma	Liposarcoma, well differentiated; Liposarcoma, differentiated	8851
	Myxoid liposarcoma	Myxoid Liposarcoma; myxoliposarcoma	8852
		Dediffernetitated liposarcoma	8854
		Dediffernetitated liposarcoma	8858
Fibroblastic sarcomas	Fibrosarcoma	Fibrosarcoma, NOS	8810
		Fascial fibrosarcoma	8813
		Infantile fibrosarcoma	8814
		Inflammatory myofibroblastic tumour	8825
	Fibromyxosarcoma	Fibromyxosarcoma	8811
	Malignant Fibrous Histiocytoma	Malignant Fibrous Histiocytoma	8830
	Dermatofibrosarcoma	Dermatofibrosarcoma, NOS (C44._); dermatofibrosarcoma protuberans	8833
		Pigmented	

		dermatofibrosarcoma protuberans (C44._); Bednar tumour	
Rhabdomyosarcoma	Embryonal RMS	Embryonal RMS	8910
	Alveolar RMS	Alveolar RMS	8920
	Pleomorphic RMS	Pleomorphic RMS	8901
	Other RMS grouped	RMS NOS	8900
		Mixed type RMS	8902
		Spindle cell RMS	8912
		RMS wit ganglionic differentiation	8921
Ewing Family of tumours		Ewing's sarcoma, Ewing's tumour, Extraskeletal Ewing tumour	9260
		Peripheral neuroectodermal tumour; neuroectodermal tumour, NOS	9364
		Askin tumour	9365
		Primitive neuroectodermal tumour, NOS	9473
Synovial sarcoma	None	Synovial sarcoma, NOS; synovioma, NOS; synovioma, malignant	9040
		Synovial sarcoma, spindle cell	9041
		Synovial sarcoma, epithelioid cell	9042
		Synovial sarcoma, biphasic	9043
Haemangiosarcoma	Angiosarcomas	Lymphangiosarcoma	9170
		Haemangiosarcoma, Angiosarcoma of soft tissue	9120
	Haemangioendothelioma	Haemangioendothelioma	9130
		Epithelioid hemangioendothelioma	9133
Kaposi's sarcoma	None	Kaposi sarcoma; Multiple haemorrhagic sarcoma	9140
Malignant Nerve Sheath tumour	None	Malignant peripheral nerve sheath tumour; MPNST, NOS	9540
		Malignant peripheral nerve sheath tumour with rhabdomyoblastic differentiation	9561

		Malignant schwanomal; neurilemoma malignant	9560
Phyllodes Tumours	None	Phyllodes tumour, malignant	9020
Sarcoma NOS	None	Sarcoma NOS	8800
		Spindle cell sarcoma	8801
		Giant cell sarcoma	8802
		Small cell sarcoma	8803
		Epithelioid sarcoma	8804
		Undifferetiated sarcoma	8805
		Desmoplastic small round cell	8806
GISTs	GISTs	Gastrointestinal stromal sarcoma	8936
Other	None	All other morphologoy codes with >1 occurrence	