

Musculoskeletal Medicine CAG - Response to Green Paper

1. Scope

The scope of the Musculoskeletal Clinical Advisory Group (the CAG) has included:

1. Orthopaedics
2. Neurosurgery (confined to spinal and back pain, and does not include cranial and vascular neurosurgery)
3. Rheumatology; and
4. Persistent pain (the majority of persistent pain being related to musculoskeletal medicine).

This submission does not include rehabilitation medicine for the named services.

2. Major areas of need

While there are an extensive range of potential issues within musculoskeletal medicine, the three areas that make up the bulk of patients and clinical need (including the areas of highest expenditure) include:

1. Osteoarthritis and joint arthroplasty
2. Low back pain (spinal pain in general); and
3. Inflammatory arthritis.

Soft tissue musculoskeletal medicine is another area of need but does not have the impact on the health system felt by the other three areas.

3. Orthopaedic related Musculoskeletal disorders and surgery

Based on the Service Descriptions provided in the revised Service Profile for Orthopaedic Services (Attachment A) the CAG believes that the Royal Hobart Hospital (RHH) provides a Level 5 service, the Launceston General Hospital (LGH) a Level 4 service, and the North West Regional Hospital (NWRH) a Level 3 service.

Each of the Tasmanian Health Organisations in the South, North and North-West need to provide an adequate number of orthopaedic surgeons to cover the on-call roster to manage and treat trauma patients, including fractured neck of femur in the elderly.

The current workforce includes:

- North: Eight orthopaedic surgeons all working in a visiting medical officer capacity (VMOs). This profile provides adequate coverage.
- North West: Four orthopaedic surgeons. This profile provides adequate coverage.
- South: the numbers vary a little at times. There are currently two staff specialists and 4-5 VMOs providing an on-call roster in association with the registrars.

This is quite a large number of orthopaedic surgeons for a state the size of Tasmania. The capacity for these surgeons to be able to do both the on-call trauma related surgery, as well as elective surgery is quite large. The capacity for elective surgery throughput is significantly underutilised for various reasons, including theatre management processes.

Clinical Pathways

There are differing pathways for the elective orthopaedic patients to enter the acute hospital system in each region. This would appear to be historically based.

South

In the South, usual practice is for an outpatient referral to be made to the hospital. The referral is triaged and the patient is transferred to a waiting list to be seen by an orthopaedic surgeon.

There is currently an established pathway run by physiotherapists with an advanced musculoskeletal scope of practice to identify those patients whose clinical symptoms do not require review by an Orthopaedic Surgeon and more specifically, who do not require an arthroplasty. This pathway is called the Comprehensive Osteo-Arthritis Pathway, or COAP. This pathway is quite overloaded, and with the recent reduction in allied health professional (AHP) staffing resources it will be even less effective in being able to provide a more cost efficient pathway for patients through the health system.

Soft tissue injuries presenting through the emergency department (ED) are redirected to an AHP musculoskeletal assessment pathway for follow-up. This is another effective strategy that has helped to reduce demand on the orthopaedic clinics as the majority of these patients do not require triaging for review by an orthopaedic surgeon.

There is an established clinic for patients who require follow-up following a fracture. However, a gap has been identified for both out-patients and inpatients who require a follow-up program for further fracture prevention when this is appropriate.

Further requirements for the South:

- Provide additional clinic sessions / AHP resources for COAP.
- Continue to provide and adequately resource soft tissue injuries and fracture clinics.
- Establishment of a secondary fracture prevention program for patients susceptible to bone fractures.

North

In the North, the majority of patients with musculoskeletal clinical conditions are assessed in private orthopaedic practices. In many cases, an assessment is made that the patient requires an arthroplasty. The patient is provided with three options: (1) go on the public hospital waiting list; (2) pay for the surgery; or (3) take out private health insurance and wait 12 months before undergoing surgery.

If the patient chooses to go on the public hospital waiting list, they are then reviewed within the public sector. This means that the patients who do not require arthroplasty are screened out and redirected onto a different pathway, which allows the patient the opportunity to elect not to go onto the protracted waiting list. This gives the potential for decreasing the length of the waiting list.

There is no AHP pathway through the ED in the North for soft tissue injuries. The patient is reviewed in the orthopaedic clinic. This is certainly not the most cost effective way for these patients to be managed.

Further requirements for the North:

- Establishment of clinics for soft tissues injuries; fractures; and a secondary fracture prevention program for patients susceptible to bone fractures.
- Review current allied health/nursing resources to run soft tissue injury clinics.

North West

In the north west the majority of patients with musculoskeletal conditions access public orthopaedic clinics. The north west has a single point of entry for all referrals to see an orthopaedic specialist. There is also a specified pathway for patients with hip and knee problems who access the Orthopaedic Early Intervention Service (OEIS). Patients are referred to the Orthopaedic clinic in the first instance from their General Practitioner. If they have hip and knee problems they are simultaneously referred to OEIS to be seen by a Physiotherapist, Occupational Therapist, Dietitian and Pharmacist. Pre-surgical patients also access a “Prehab” program to improve their fitness prior to surgery.

There is currently no pathway within the emergency department for soft tissue musculoskeletal injuries.

Further requirements for the North West:

- Expand the OEIS program for other orthopaedic conditions in relation to the role delineation for the region.

Recommendation 1

Identify appropriate pathways for patients presenting to EDs with soft tissue injuries so that they are sufficiently managed via an AHP led pathway.

In all regions orthopaedic surgeons have indicated that efficiencies could be made in regards to their time; theatre and processes; and improved patient pathways.

Appropriate referrals for emergency, specialist outpatient consultations and inpatient admissions would be facilitated by shared development of primary care pathways (e.g.: Tasmanian HealthPathways – see below) and improved communication strategies to improve capacity for assessment and management of many musculoskeletal conditions in primary care.

Dedicated emergency theatres to allow surgical intervention for orthopaedic trauma patients would prevent elective patients being consistently postponed, resulting in their clinical condition deteriorating further (e.g. from requiring an arthroplasty to a joint replacement). It is well recognised that one of the major costs associated with orthopaedic surgery is the cost of the prosthesis for joint replacement.

Recommendation 2

Establishment of dedicated emergency theatres to ensure more efficient use of orthopaedic surgeons' time; and decrease costs for prosthesis joint replacements for elective patients.

Efficient use of the theatre time was also identified as a barrier to cost-effective orthopaedic management of patients. Factors contributing to inefficiencies within the theatres need to be further explored. There are often comparisons between the increased numbers of orthopaedic cases that can be undertaken within the private sector when compared to the public sector, yet within the same time frame.

Recommendation 3

Explore factors contributing to inefficiencies within the theatres and ways to ensure more efficient use of theatre time.

The clinical pathway through the acute hospital system could be enhanced for patient's requiring orthopaedic joint surgery such as knee arthroplasty and hip replacement or for fractured neck of femur:

- For arthroplasty patients, the establishment of a 7 day per week, dedicated ward staffed with experienced nursing staff and AHP led rehabilitation team (predominately by physiotherapists) would significantly improve patient outcomes and reduce the length of hospital stay.
- Similarly, the involvement of a medically-based ortho-geriatrician in the care for older patients post hip fracture surgery and hip replacement surgery would improve patient survival outcomes and help reduce their hospital length of stay.
- The follow-up for patients who have had fractures (i.e. neck of femur etc.) is important to prevent and/or treat osteoporosis and decreasing potential for further fractures. This is recognised as a cost effective component of their management.

Recommendation 4

Establish dedicated orthopaedic beds for patients post joint surgery; with dedicated experienced nursing and AHP staff to improve patient outcomes and reduce length of stay.

Recommendation 5

Consideration of ortho-geriatrician medical involvement in the care and management of older patients post joint replacement surgery.

Recommendation 6

Establish secondary fracture prevention pathways.

The development of an integrated pathways with appropriate personnel; robust data collection and key performance monitoring is important for long term strategic planning for theatre and inpatient service and workforce requirements.

The development of a Statewide Elective Surgery Waiting List to facilitate the flow of patients between regions and allow long waiting patients to choose to be treated quickly at hospitals with capacity was highlighted within the Government's Issues Paper.

This concept has been rejected by all orthopaedic surgeons as not cost effective and inappropriate due to a number of reasons clinically, socially and professionally based. However it may be feasible to have shared waitlists for outpatient clinics for specific conditions and procedure specific surgical waitlist shared across co-located orthopaedic surgeons with equivalent skill sets that facilitates surgery prioritised by clinical need. The 'availability' of elective surgery is controlled by issues related to theatre access, which could be varied through clinical redesign measures.

Purchasing of prosthesis

Central purchasing of prosthesis would be associated with a significant reduction in cost. To achieve this outcome some degree of consensus is required regarding which prosthesis to purchase from the variety of prosthesis available.

This could be achieved through establishment of a Clinical Advisory Group for Orthopaedics to provide clinical advice regarding purchasing of prosthesis and development of agreed policies with variances as required for varying patient cohorts.

Recommendation 7

Establish an Orthopaedic Clinical Advisory Group to consider central purchasing for prosthesis and development of agreed policy regarding use.

4. Rheumatology related musculoskeletal disorders

Rheumatology at the RHH currently provides a Level 6 service, utilising federally and externally funded posts. The RHH Rheumatology service has 1.08FTE consultant staff, and is not funded as a statewide service. The waiting list for patients to be seen at RHH has grown by 300% since 2012. There are no public rheumatology services available in the North and North West. There is one rheumatologist providing a private service in the North/North-West.

There are currently seven consultants with rheumatology specialty qualifications in Tasmania, providing up to 4FTE in clinical rheumatology practice, with only 1.08 FTE in the public system. Based on a Tasmanian population of 512 000, there are 0.78 rheumatologists in clinical practice per

100 000 population, well under the national average of 1.3 per 100 000.

There is no paediatric rheumatologist in Tasmania, although there are two adult rheumatologists who have experience in managing paediatric rheumatological conditions and one paediatrician with an interest in rheumatology, all based in Hobart. In order to ensure the best quality of care given a relative low volume of patients, formal links with paediatric rheumatology services in Melbourne should be established with medical, specialty nursing and allied health care provided locally where feasible with advice and/or review available for more complex cases, utilising telehealth where possible.

Recommendation 8

Establish formal links with paediatric rheumatology services in Melbourne, with medical, specialty nursing and allied health care provided locally where feasible.

The RHH is a RACP accredited site for core advanced training in rheumatology. To maintain accreditation the hospital requires three rheumatology consultants to provide clinical service and be available on site. The advanced training post in rheumatology is currently federally (STP) funded.

The need to assess patients with inflammatory arthritis early is well established within the literature. The triage process to identify patients with new inflammatory arthritis and other urgent clinical scenarios has been developed to facilitate this. The outcome from early intervention and appropriate treatment (treat to target) has seen a revolution in patient outcomes allowing people to remain functional within the community and the workforce.

High cost biological medications are increasingly used as effective therapies for a

range of chronic complex rheumatological conditions. Care co-ordination and consumer education is increasingly important in managing this patient group in line with national and local chronic disease strategies. This role is currently undertaken by an externally funded specialist nurse.

The RHH Rheumatology Service established a Spinal Assessment Clinic (SAC) as a sensible clinical pathway to triage and assess people with spinal pain. Whilst this has shown to be cost effective for those patients who can be seen (particularly if they are taken off the neurosurgical referral pathway) this system is also now being overwhelmed. The clinical pathway has involved an assessment from a physiotherapist with advanced scope of musculoskeletal practice under medical supervision. Due to a reduction in AHP resourcing for this service component, the service is becoming more inefficient and waiting list is becoming unmanageable.

The situation has become unruly, in that outpatient referrals for patients with back pain are sent to neurosurgery, rheumatology, the spinal assessment clinic and persistent pain clinics simultaneously in anticipation that the first available clinic will be able to assess the patient systematically. This is totally inappropriate.

There is a need for a centralised triaging process for patients with musculoskeletal complaints, with current waiting times for assessment being available to the referring general practitioner. This will stop multiple referrals for the one patient to multiple areas in the system and allow the patient to have an appropriate pathway for the problem they present with. Back pain needs to be assessed in a pathway that has significant allied health component within it. There is a need for administrative management and support with cross-referencing for referrals to improve efficiency within the system. The joint

replacement subgroup can also be assessed with this paradigm.

There is a huge body of evidence demonstrating that appropriate AHP management often within a group structure, within a community setting is the most efficient way of managing patients with back and spinal pain; and prevent the majority of the patients needing to be seen within the acute hospital system. This involves AHPs (particularly physiotherapists) with advanced scope of musculoskeletal and chronic pain management practice. Patients with high levels of pain need a pathway for appropriate assessment and management. These pathways could include:

- a spinal assessment structure as currently established at the RHH; or
- a more specific medically-supervised and AHP run clinic as an outpatient.

Patients with lower back pain do not need to see a neurosurgeon as the first point of reference. Developing integrated pathways within the community and at the hospital level will save a huge amount of time and money. However, a commitment to provide adequate and sustainable numbers of AHPs and appropriate administrative support is required.

Recommendation 9

Establishment of additional clinical pathways and resources to manage increasing demand for patients with lower back and spinal pain within the North and North-West regions of the state, to facilitate a streamlined statewide service.

Recommendation 10

Establish administrative support for cross-referencing and centralised triaging for patients with back pain.

Future clinical service profile under a single Tasmanian Health Service

At present, there is a significant gap in services in the North/North-West, and insufficient consultants across both public and private sectors to provide a statewide service. Options to develop an integrated, accessible and sustainable service will need careful consideration, including patient transport services, development and resourcing for Level 4 services in the Northern regions, adequately resourced hub and spoke models with local care co-ordinators and use of telehealth.

The clinicians at the Level 6 facility would act in a leadership and educational capacity to help identify those patients with the greatest need and contribute to management.

Recommendation 11

Consider resourcing requirements and transport systems for the establishment of a statewide rheumatology service based at RHH.

5. Neurosurgical related musculo-skeletal disorders

The RHH currently provides a Level 6 Neurosurgery service. This a statewide service provided by five neurosurgeons. An outreach clinic is currently provided to the North-West of the state. The current resourcing is adequate to provide for an on-call roster, in association with the registrars.

There is capacity for the neurosurgeons to be able to do more surgery, however this limited due to inadequate allocation of theatre time and theatre inefficiencies.

The pathway of entry into neurosurgery is via outpatient referral, where the patient is triaged and added to a waiting list to be seen by the neurosurgeon. The system is completely overwhelmed with the waiting list for an appointment currently at unsustainable levels. As mentioned above, efficiencies could be made with improved triaging and exploration of alternative patient pathways for spinal pain.

The Spinal Assessment Clinic (SAC) undertook a pilot study in 2009-2010 to review this, which confirmed that alternative evidence based pathways are much more efficient and cost effective. The waiting time for patients was reduced from over 2 years to 6 months, and 94% patients were assessed as not requiring or not suitable for surgical intervention i.e. they were waiting in the wrong clinical pathway. Costly investigation and imaging was reduced by 90%. There was high patient satisfaction (93%) with the service provided.

Recommendation 12

Re-direct patients from the neurosurgical entry pathway for assessment and management of spinal pain to either a spinal assessment structure as currently established at the RHH; or a more specific medically-supervised and AHP run clinic based in the primary care health setting.

6. Persistent pain related musculo-skeletal disorders

The persistent pain service at the RHH currently provides a regional Level 6 service, and is the best example of a truly multidisciplinary unit approach to patient management.

Within the Persistent Pain Unit at the RHH, patients are assessed using a multidisciplinary assessment pathway. Patients enter the pathway via outpatient referral, which is then triaged. Patients deemed appropriate for assessment and management through the Persistent Pain Unit are sent a questionnaire. Upon return of the questionnaire, patients are invited to attend a group introduction session which outlines the education component as to what persistent pain is; together with the management strategies utilised to help people cope with persistent pain.

Currently the persistent pain service at the RHH is not funded as a statewide service. The service does accept referrals from the North and North-West of the state; however this is becoming clinically unworkable and unsustainable due to a reduction in AHP staffing resources. To continue to offer this service statewide in an efficient way requires the identification of alternative and additional resources, both in the public and private AHP

sector (for psychology and physiotherapy in particular).

There is a major deficiency for people on waiting lists for pain management; there is no pathway for patients on the neurosurgery waiting list who have spinal problems; or orthopaedic patients who require pain management whilst waiting for an arthroplasty. This is managed within the community by the patient's General Practitioner. The persistent pain service does not have clinical pathways or personnel in place to be able to help these people.

The use of telehealth to facilitate would be a workable option for this service. However, to provide an efficient telemedicine service requires regional based resources such as community based AHP or RN with advanced scope of musculoskeletal and chronic pain management practice, and administrative support to coordinate patient appointments and care requirements from the regional point of contact; in collaboration with the service provider in the South.

Recommendation 13

Establish a fully functioning persistent pain service statewide with appropriate funded resourcing requirements.

7. Improving service efficiency and capacity

Each of the named units has critical positions that enable and help to improve efficiencies:

- **Orthopaedics** at the RHH has dedicated positions that allow for improved efficiencies being an Administrative Support Officer and a Waiting List Manager.
- **Rheumatology Services** at the RHH have an (unfunded) dedicated Rheumatology Nurse who assists in the triaging of patients and follows-up with patients who are prescribed high cost immunosuppressant drugs, that have the potential to cause problems that develop quickly and need prompt medical management.
- **The Persistent Pain Service** has a high-level Administrative Support Officer who works with nursing staff to coordinate the patient's journey through the system.

Tasmanian HealthPathways is a critical approach to improving capacity in primary care teams, closely linked with clinical redesign strategies in acute hospitals, and facilitating timely and effective access for the most appropriate patients to specialist services. Carefully designed approaches for primary care teams to obtain advice and guidance from specialist teams statewide are written into each pathway, as well as efficient referral systems for assessment. These pathways will be critical to better supporting primary care teams to manage patients with a wide range of musculoskeletal conditions in the community, simultaneously improving access to care.

Recommendation 14

Identify resource requirements for service provision within each unit to improve efficiencies.

Recommendation 15

Facilitation of primary care pathways and communication strategies across health sectors to improve capacity for assessment and management of musculoskeletal conditions in primary care and ensure more appropriate referrals for emergency and specialist outpatient consultations and ongoing primary care following discharge from secondary care.

8. Service Profiles in the Tasmanian Role Delineation Framework

The CAG has reviewed the service profile for Orthopaedic Services, Neurosurgery Services and Rheumatology and Pain Management Service presented in the draft Tasmanian Role Delineation Framework.

The CAG has suggested a number of improvements included in Attachment A (Orthopaedic Services), Attachment B (Neurosurgery Services) and Attachment C (Rheumatology and Pain Management Services).

Recommendation 16

The CAG recommends that the proposed changes to the Orthopaedic Service Profile (Attachment A); Neurosurgery Service Profile (Attachment B); and Rheumatology and Pain Management Service Profile (Attachment C).

ORTHOPAEDICS SERVICES

Orthopaedics is the clinical specialty involving the treatment of diseases and abnormalities of the musculoskeletal system due to trauma, congenital developmental abnormalities, degenerative or disease processes.

Depending on the role level of service, this service may include general orthopaedics, trauma, joint replacement, orthotics and a range of other specialised components. Treatment ranges from non-surgical management to surgical management on an acute, acute arranged and elective basis. Higher level orthopaedic services rely on access and links to other appropriate specialists.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.

Level 1 Orthopaedics Services

No Level 1 service. Refer to higher level.

Level 2 Orthopaedics Services

Service description

A Level 2 service provides minor reduction of fractures performed on low-risk patients by a registered medical practitioner or visiting general surgeon with experience in orthopaedics. Regional or general anaesthesia is given by accredited medical practitioner. An orthopaedic consultation service is also available.

Service requirements

- Treatment rooms with plaster equipment.

Workforce requirements

- Registered medical practitioner
- May have plaster technician
- Access to advice from specialist orthopaedic specialists.
- Access to Level 1 service or higher Allied Health outpatient services as required.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
3	-	3	3	2

Level 3 Orthopaedics Services

Service description

A Level 3 service provides services at Level 2 plus it performs common and intermediate procedures on low or moderate risk patients by a visiting orthopaedic or general surgeon credentialled in orthopaedics.

Service requirements

As for Level 2 plus:

- General orthopaedic equipment and theatre x-ray available.

Workforce requirements

As for Level 2 plus:

- Visiting orthopaedic surgeon
- Access to specialist RN with orthopaedics expertise
- Medical practitioner accredited to provide anaesthetic
- Medical practitioner on-site 24 hours and on-call within 30 minutes
- Specialist orthopaedic RN expertise on-site
- Access to Level 2 allied health service or above including physiotherapist.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
3	-	4	3	3

Level 4 Orthopaedics Services

Service description

A Level 4 service provides services at Level 3 plus it performs common and intermediate procedures on low or moderate risk patients by an orthopaedic surgeon.

Service requirements

As for Level 3 plus:

- Access to Level 4 Rehabilitation Service
- Dedicated orthopaedic inpatient beds
- Accredited orthopaedics surgical training site.

Workforce requirements

As for Level 3 plus:

- Appointed orthopaedic specialists on-site
- Orthopaedic registrar on-call 24 hours
- Appointed specialist anaesthetists on-site and on-call 24 hours
- Specialist orthopaedic senior RN
- Designated orthopaedic allied health services for inpatients at a Level 3 service or above and provision of musculoskeletal outpatients at a Level 2 service or above
- Some specialist allied health outpatient services for pre-surgical and post-surgical follow up.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
4	4	4	4	4

Level 5 Orthopaedics Services

Service description

A Level 5 service provides services at Level 4 plus it provides a full range of major diagnostic and treatment procedures on low, moderate and high risk patients performed by on-call orthopaedic surgeons.

Service requirements

As for Level 4 plus:

- Network referral role
- On-site ICU
- May have teaching and research role.

Workforce requirements

As for Level 4 plus:

- Orthopaedic surgeons on-site and on-call 24 hours
- Radiologist on-call 24 hours
- Access to specialised allied health services Level 3 service and above for inpatients. More access to pre and post-surgical allied health programs is available for outpatients i.e. Level 4 service and above.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
5	4	4	4	5

Level 6 Orthopaedics Services

Service description

A Level 6 service provides services at Level 5 plus it has the ability to deal with all cases including full range of complex cases (and all emergencies) in association with other specialists.

Service requirements

As for Level 5 plus:

- Statewide referral role
- Undergraduate and postgraduate teaching role
- Research role
- Links/access to comprehensive acute and persisting pain management and rheumatology services
- Use of consultant led but allied health delivered comprehensive clinical assessment and triage systems for degenerative musculoskeletal and soft tissue conditions
- Link to Level 5 Rehabilitation service.

Workforce requirements

As for Level 5 plus:

- Dedicated surgical staff with clinical competency in a range of sub-specialty areas available at close proximity 24 hours
- Allied health professionals available for weekend/after-hours service for inpatients as required. Outpatients services are as per Level 5 Orthopaedics Service.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
6	5	5	5	5

Neurosurgery

Neurosurgery is the surgical specialty that deals with the diagnosis and treatment of disorders which affect any portion of the nervous system, including the brain, spinal cord, peripheral nerves, and extra-cranial cerebrovascular system.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.

Level 1 Neurosurgery

No Level 1 service. Refer to higher level.

Level 2 Neurosurgery

No Level 2 service. Refer to higher level.

Level 3 Neurosurgery

No Level 3 service. Refer to higher level.

Level 4 Neurosurgery

No Level 4 service. Refer to higher level.

Level 5 Neurosurgery

Service description

A Level 5 service provides care for patients with minor head injuries. Uncomplicated minor neurosurgical procedures are provided by a general surgeon whose scope of practice includes minor neurosurgery. A consultant neurosurgeon participates in the credentialing and scope of practice decisions regarding general surgeon neurosurgical practice.

Service requirements

- Link with a Level 4 rehabilitation services
- Access to Level 6 Neurosurgical service in the network 24 hours.

Workforce requirements

- General surgeon with scope of practice that includes minor neurosurgical procedures
- Neurosurgical consultation available
- Access to designated allied health services.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
4	4	4	4	5

Level 6 Neurosurgery

Service description

A Level 6 service is a specialist neurosurgical services that has the capability to deal with all elective and emergency neurosurgical cases.

A Level 6 service is responsible for coordinating all interstate neurosurgical transfers.

Service requirements

As for Level 5 plus:

- Statewide referral role
- Designated neurosurgical ward
- Designated neurosurgical ICU / HDU
- Link with Level 5 rehabilitation service
- Consultant led but allied health delivered comprehensive clinical assessment and triage of chronic spinal pain conditions
- Provides undergraduate and postgraduate teaching
- Active research role
- Access to pain management multidisciplinary team on-site for assessment of chronic spinal pain conditions
- Access to medical subspecialties including infectious disease and neurology on-site.

Workforce requirements

- Neurosurgical consultant on-call 24 hours
- Neurosurgical registrar on-call 24 hours
- Specialist neurosurgical senior RNs on-site 24 hours
- Access to medical subspecialties including infectious disease and neurology on-site.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
6	6	5	5	6

RHEUMATOLOGY AND PAIN MANAGEMENT

Rheumatology is a sub-specialty of internal medicine that diagnoses and manages arthritis and other rheumatic diseases.

Pain management specialists are experts in the diagnosis of causes of pain and in the management of pain. Rheumatologists, anaesthetists, neurologists and sub-specialist surgeons may specialise in pain management. Specialist pain services are comprised of multidisciplinary teams of medical practitioners, allied health professionals and specialist nurses.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.

Level 1 Rheumatology and Pain Management

No Level 1 service. Refer to higher level.

Level 2 Rheumatology and Pain Management

No Level 2 service. Refer to higher level.

Level 3 Rheumatology and Pain Management

No Level 3 service. Refer to higher level.

Level 4 Rheumatology and Pain Management

Service description

A Level 4 service provides ambulatory rheumatology services by specialist medical practitioner with sub-specialty training in rheumatology, and pain management services by a multidisciplinary team led by specialist medical practitioner with sub-specialty training in pain medicine. No inpatient rheumatology or pain medicine services are provided.

A Level 4 service has strong network linkages with a Level 6 Rheumatology and Pain Management service.

Service requirements

- Ambulatory care provided by appointed physician practicing in general medicine
- Formal network linkage with Level 6 service for the referral of patients with rheumatological and pain management conditions (as specified in designated statewide musculoskeletal clinical pathways)
- Access to visiting rheumatologist or via telehealth
- Access to Level 6 interdisciplinary Rheumatology and Pain Management Service
- On-site medically supervised ambulatory infusions service with patient therapies determined in consultation with Level 6 Rheumatology and Pain Management Service
- Access to rheumatology clinical trials service in the network

Workforce requirements

- Physician practicing in general medicine with sub-specialty training in rheumatology or pain medicine
- 24 hour access physician practicing in general medicine (on-call)
- Medical practitioner on-site 24 hours
- Allied health professionals on-site.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
4	4	4	4	4

Level 5 Rheumatology and Pain Management

Service description

A Level 5 service provides services at Level 4 plus may provide some inpatient rheumatology and pain management services.

Service requirements

As for Level 4 plus:

- Ambulatory and inpatient rheumatological care provided by appointed rheumatologist
- Pain management services provided by designated multidisciplinary team with formal network linkage to Level 6 Rheumatology and Pain Management service
- On-site infectious diseases service
- Access to PET scanning and interventional radiology in the network
- Access to neurosurgery, orthopaedics and vascular surgical services in the network
- May have teaching and research role.

Workforce requirements

As for Level 4 plus:

- Appointed rheumatology specialist
- Designated pain management multidisciplinary team
- Access to specialist rheumatology and pain medicine CNCs is desirable
- Medical registrar on-site 24 hours
- Sub-specialists available on-site for consultation
- Registrar, RMO
- Specialised allied health services on-site.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
4	4	4	5	4

Level 6 Rheumatology and Pain Management

Service description

A Level 6 service provides services at Level 5 plus a full range of clinical rheumatology and pain medicine services and 24 hour clinical and laboratory services available on-call.

Service requirements

As for Level 5 plus:

- On-site interdisciplinary pain management service (with a minimum of pain medicine, rheumatology, anaesthetics, physiotherapy and psychology expertise)
- On-site neurosurgery and orthopaedics
- On-site PET scanning and interventional radiology
- On-site vascular surgical service
- Accredited rheumatology and pain medicine training programs
- Teaching and research role
- Close links with clinical trials service.

Workforce requirements

As for Level 5 plus:

- On-site rheumatology registrar
- On-site pain medicine registrar
- Specialist rheumatology RNs
- Specialist pain medicine RN
- Advanced scope physiotherapist.

Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
4	4	5	6	6