

Short title: Multidisciplinary and interdisciplinary care in specialist pain services and specialised pain units

The Faculty of Pain Medicine (FPM/faculty) of the Australian and New Zealand College of Anaesthetists (ANZCA) has developed this background paper to inform the accompanying position statement on best practice for multidisciplinary and interdisciplinary care in specialist pain services and specialised pain units in Australia and Aotearoa New Zealand.

Introduction

Persistent pain is common, disabling, and associated with substantial personal, social and health-system burden. Contemporary pain medicine has therefore moved away from narrowly biomedical or procedure-dominant models toward sociopsychobiomedical, function-focused and person-centered models of care delivered by coordinated teams. Within this evolution, multidisciplinary and interdisciplinary pain services have emerged as the principal specialist treatment pathway for people with persistent pain who have complex disability, psychosocial comorbidity, failed prior unimodal treatment, problematic medication use or marked barriers to participation.

The distinction between multidisciplinary and interdisciplinary care is important. Stanos and Houle described multidisciplinary care as involving several disciplines contributing to patient management, whereas interdisciplinary care requires integration of those disciplines through shared goals, coordinated treatment planning, regular communication and a rehabilitation focus grounded in the biopsychosocial model (Stanos and Houle 2006). Danilov and colleagues similarly emphasised that interdisciplinary pain management is more than colocation of professions; it requires coordinated biopsychosocial assessment, functional restoration and team processes that place the patient as an active participant in care (Danilov et al. 2020). Hooten and colleagues extended this framework by describing a continuum from multidisciplinary to interdisciplinary and transdisciplinary pain care, arguing that increasing integration may be required to align patient, clinician and payer priorities in complex chronic pain systems (Hooten et al. 2024).

For the purposes of this background paper, multidisciplinary care denotes contributions from several disciplines within a shared service or program. Interdisciplinary care entails active integration of those contributions through shared goals, regular communication, joint planning and collective review with the person receiving care and, where appropriate, their family or carers. This distinction does not imply that multidisciplinary care is of lesser value; rather, it clarifies the level of coordination required for people with more complex needs.

This background paper applies across the life course. Specialist pain services may provide care to adults, children and adolescents, or to mixed populations. Where children and young people are cared for, assessment and management should be developmentally appropriate centred around the child and their family, with access to paediatric expertise and appropriate consultation, referral and transition pathways where required.

Multidisciplinary and interdisciplinary care does not exclude procedural pain management. Rather, it provides the clinical framework in which diagnostic and therapeutic procedures can be selected appropriately, delivered safely and linked to broader goals of functional restoration, participation, rehabilitation and self-management. Procedures may have an important role for selected patients but do not replace comprehensive sociopsychobiomedical assessment or multimodal management.

Why multidisciplinary and interdisciplinary pain care matters

Interdisciplinary pain management has a strong conceptual and empirical foundation. Stanos and Houle synthesised evidence showing that multidisciplinary pain clinics and interdisciplinary functional restoration programs can improve function, pain, pain behaviours and healthcare use compared with unimodal care, especially when programs combine medical, psychological, physical and vocational elements in an integrated manner (Stanos and Houle 2006). Robbins and colleagues provided prospective outcome data from a tertiary interdisciplinary program, demonstrating sustained improvements across physical, psychological and vocational domains, while also showing that payer-driven fragmentation of physiotherapy from the rest of the program undermined outcomes (Robbins et al. 2003). This study remains highly relevant because it shows that team integration is not a cosmetic feature but a determinant of treatment effect.

The practical consequences of model choice are also evident at service level. Hayes and Hodson described the Hunter Integrated Pain Service transition from an older, higher-intensity, more biomedical service model to a whole-person model centred on early education, self-management, personalised planning and stronger primary care linkage (Hayes and Hodson 2011). Over time, this redesign was associated with shorter waiting times, reduced procedural activity, greater use of personalised management plans and stronger engagement with non-procedural care. Davies and colleagues showed that adding a structured interprofessional pre-clinic group education program in Western Australian tertiary public pain units reduced waiting times and cost per new patient while improving patient satisfaction and self-management indicators (Davies et al. 2011). Together, these Australian studies support the proposition that multidisciplinary care improves not only patient outcomes but also service efficiency, throughput and alignment with contemporary pain practice.

Defining the service model

Specialist pain services provide coordinated multidisciplinary or interdisciplinary care for people with severe, persistent or complex pain through a sociopsychobiomedical, function-focused and rehabilitative model. Complex diagnostic, interventional and pharmacological decisions require specialist medical leadership informed by the full interdisciplinary team (Kaiser et al. 2013; Hooten et al. 2024).

A specialist pain medicine physician is an FFPMANZCA, or a medical practitioner whose vocational scope of practice in pain medicine is formally recognised by the relevant national regulatory authority. The physician provides clinical leadership for complex pain assessment, diagnosis, risk management and treatment, working as part of, and not in substitution for, an expert multidisciplinary team.

A specialist pain service should provide more than access to several disciplines. Where such services are described as specialised pain units, this should denote not merely the presence of multiple disciplines but an interdisciplinary, sociopsychobiomedical model of care with coordinated assessment, shared planning and active rehabilitation. Kaiser and colleagues, writing from the German multimodal pain therapy context, argued that interdisciplinary multimodal pain treatment requires coordinated biopsychosocial care delivered by an equal-value team under pain-specialist supervision, with mandatory team meetings, active rather than passive treatment, and a program structure of sufficient intensity to support behavioural and functional change.

For alignment with the accompanying position statement, a specialised pain unit is understood as a specialist pain service that meets relevant standards for specialist pain medicine practice, supervision, safety, quality and training through applicable FPM/ANZCA accreditation and governance processes, or is seeking such recognition. For present purposes, its defining characteristic is an interdisciplinary, sociopsychobiomedical model of care, not its training-accreditation tier, procedural volume, or the mere availability of individual disciplines. A specialist pain service is a medically led clinical service providing assessment and treatment under the clinical leadership of a specialist pain medicine physician, using multidisciplinary or interdisciplinary pain management appropriate to the population served.

In practical terms, an interdisciplinary specialist pain service is identifiable not only by the disciplines available to it but by the way care is organised. Key features include coordinated sociopsychobiomedical

assessment; shared case formulation; jointly developed and reviewed treatment plans; regular multidisciplinary communication; active rehabilitation and self-management support; appropriate medication review and stewardship; communication with referrers and other care providers; and systems for safety, quality improvement and multidimensional outcome measurement. The configuration of these elements may vary with local population needs, service scope and available capability.

Medication review and stewardship are integral to contemporary interdisciplinary pain care. This includes reviewing benefit, harm and functional impact of analgesic and adjuvant medicines; identifying medication-related risk; supporting appropriate optimisation, tapering or deprescribing where clinically indicated; and coordinating medication plans with primary care and other prescribers. Medication management should be considered alongside rehabilitation, psychological care, self-management and the person's broader functional goals, rather than as an isolated treatment stream.

Tauben's measurement-based stepped-care model adds a systems perspective by linking interdisciplinary pain management to explicit measurement and tiered escalation across primary, specialty and tertiary settings (Tauben 2013). This approach is useful for the development of professional standards because it suggests that specialist pain services should not operate as isolated clinics but as part of a broader system with defined thresholds for referral, review and stepped intensification. Dorflinger and colleagues demonstrated a related principle in primary care, where interdisciplinary pain and opioid reassessment clinics embedded within the Veterans Health Administration improved consult matching, multimodal access and opioid safety through redesign that involved psychology, pain medicine, rehabilitation medicine and physical therapy working together (Dorflinger et al. 2014).

Fishman and colleagues developed interprofessional core pain management competencies across professions, reinforcing that team-based person-centered pain care depends on shared knowledge of the multidimensional nature of pain, assessment, management and contextual influences on care (Fishman et al. 2013). For specialist units, this supports expectations not only about staffing but also about team capability, supervision and pain-specific training, with medical leadership providing overall accountability for diagnosis, risk management and coordination of interdisciplinary care within these competency frameworks (Fishman et al. 2013; Kerns et al. 2011).

In New Zealand, the Health New Zealand | Te Whatu Ora Pain Management Service Specification (Tier Two), which is mandatory when these services are purchased under the Nationwide Service Framework, defines two service levels based on catchment and available specialist services. Level One Interdisciplinary Pain Centres provide all Level Two services plus full interdisciplinary assessment, individual management plans, day and/or outpatient pain-management programs and a wide range of procedural and invasive interventions, and are expected to engage in research. Level Two Interdisciplinary Pain Clinics provide district-based interdisciplinary care, consultative and assessment services and simple procedures, collaborating with Level One services. The specification requires each interdisciplinary team to include a specialist pain medicine physician holding FPM Fellowship and a vocational scope of pain medicine recognised by the Medical Council of New Zealand (Health New Zealand | Te Whatu Ora 2024). At national policy level, the proposed *Mamaenga roa* Model of Care for people living with chronic pain describes four regional specialist hubs supported by locality-based care, peer support and self-management, underpinned by Te Tiriti o Waitangi and Te Whare Tapa Whā (Manatū Hauora 2022).

Terminology in New Zealand requires particular care. Practitioners from a range of medical specialties may have valuable expertise in musculoskeletal or pain-related care and may use terms such as "pain specialist" informally. For the purposes of formal specialist pain service definitions, this should be distinguished from a vocational scope of pain medicine formally recognised by the Medical Council of New Zealand. Accordingly, in New Zealand, the term "specialist pain medicine physician" is intended to align with Health New Zealand requirements for FPM Fellowship and vocational scope of pain medicine recognised by the Medical Council of New Zealand.

By comparison, Australian specialist pain services operate within a mix of national directions, such as the National Strategic Action Plan for Pain Management and FPM-led initiatives, together with state-based

models of care and commissioning frameworks. This produces greater jurisdictional variation in service specification, tiering, commissioning arrangements and access than in the nationally mandated New Zealand Tier Two framework, where a single nationally mandated Health New Zealand service specification applies to publicly funded pain services (Australian Government Department of Health 2019; Blyth et al. 2020).

Procedures within multidisciplinary and interdisciplinary pain care

Persistent pain is complex and is commonly associated with biological, psychological, social, functional and occupational consequences. Contemporary pain-management standards therefore support coordinated multidisciplinary care rather than care based on a single therapeutic modality. The International Association for the Study of Pain (IASP) describes multidisciplinary pain management as integrated multimodal care delivered by professionals from different disciplines who collaborate in assessment, treatment planning and review. The IASP multidisciplinary pain center development manual also recognises that a service may need systems for consultation with disciplines or expertise not represented within its directly employed team, reflecting the practical reality that no individual service can provide every required expertise internally (IASP 2009; IASP 2021).

Interventional procedures can have an appropriate role in pain management, including diagnostic clarification, symptom palliation, facilitation of rehabilitation, restoration of function, or management of specific pain syndromes. Their role is selective and should be proportionate to the available evidence, the individual person's clinical context, and the expected balance of benefit and harm. The FPM Procedures in Pain Medicine Clinical Care Standard states that invasive pain procedures may supplement multidisciplinary therapies for selected patients, including to assist diagnosis or palliate symptoms in order to improve function and quality of life (ANZCA FPM 2020).

The Australian Pain Society similarly recommends that interventional pain management procedures be undertaken in the context of assessment for, or delivery of, a broad interdisciplinary approach to pain management. It notes that procedures may offer meaningful relief for selected patients but are not universally effective, may yield incomplete or time-limited benefit, and should form one component of a comprehensive management strategy rather than replace rehabilitation, psychological care, medication optimisation or functional restoration (APS 2010).

Technical success does not necessarily equate to meaningful improvement in pain-related disability, psychological distress, participation or quality of life. Where a procedure produces a period of reduced symptoms or improved function, that opportunity should be actively used to progress rehabilitation, physical reconditioning, psychological treatment, vocational support and self-management. The APS specifically recommends access to a multimodal or multidisciplinary plan so that any therapeutic window generated by a procedure can be fully used (APS 2010).

Safe access to procedures requires more than an available operator. The FPM Procedures in Pain Medicine Clinical Care Standard requires clinicians performing pain procedures to have procedure-specific knowledge, training and endorsement, or appropriate supervision. It identifies the importance of credentialing, relevant skills training, continuing professional development, quality improvement, audit, peer review, safe facilities, adequate staffing, appropriate imaging and sedation arrangements where required, emergency preparedness and continuity of care (ANZCA FPM 2020).

A specialist pain medicine physician or specialist pain service need not directly provide every clinically indicated procedure. Where a procedure is not available within the treating service, the service should support timely, appropriately governed and clinically integrated referral, communication and continuity of care with an appropriately credentialed procedural clinician. Arrangements should clarify responsibilities for selection, shared decision-making and consent, performance, communication of findings and complications, post-procedure management, rehabilitation, follow-up and return of care to the ongoing multidisciplinary team.

Accordingly, specialist pain services should maintain demonstrable access to relevant procedural expertise, either directly or through formal clinical networks. Such pathways should be transparent, equitable and timely, with agreed referral criteria, credentialing requirements, shared-care responsibilities, outcome review and feedback to the referring multidisciplinary team.

Workforce and team composition

Published service surveys show that multidisciplinary pain care requires recognisable core disciplines. Burke and colleagues' national Australian survey of tertiary persistent pain services identified a typical staffing mix spanning medical staff, nursing, psychology, physiotherapy, occupational therapy, psychiatry and administration, with higher-level centres having larger overall staffing complements (Burke et al. 2015). Their study remains one of the most useful empirical descriptions of workforce structure in Australian tertiary services and provides a practical basis for minimum capability discussions.

Published Australian workforce data indicate that pain medicine remains a relatively small subspecialty workforce, with 254 pain medicine specialists employed nationally in 2016 and an average of 1.0 clinician per 100,000 population across Australia, with higher ratios reported in Tasmania and South Australia (Australian Government Department of Health 2017). This per-capita supply should be interpreted as descriptive rather than normative, but it suggests that current specialist capacity is limited relative to the burden of chronic pain and is unevenly distributed across jurisdictions. Australian estimates further suggest that around 5% of the population aged 15 years and over would benefit from adult persistent pain services, reinforcing that specialist pain medicine physicians can only meet population need when embedded within broader multidisciplinary systems of care rather than functioning as isolated individual practitioners (Hogg et al. 2012; Royal Australian College of General Practitioners 2024).

The available literature does not support a single fixed recommended physician-to-population ratio or a universally accepted discipline-by-discipline staffing formula for specialist pain services (Burke et al. 2015; Australian Government Department of Health 2017). However, national service surveys consistently identify a recognisable core team comprising specialist pain medicine physicians, nursing, psychology, physiotherapy, psychiatry and administrative support, with larger and more comprehensive services having greater full-time equivalent staffing across these disciplines (Burke et al. 2015).

The minimum expectation should be understood as core multidisciplinary capability: specialist pain medicine physicians, nursing, psychology, physiotherapy, and access to psychiatry and administrative support. It is not a universal discipline-by-discipline full-time-equivalent formula, nor does it require every expertise to be directly employed by every service. Larger services will usually have broader teams, while smaller services may require formalised access to additional disciplines and expertise through networks and referral arrangements.

Where procedures are not provided directly, services require formal access pathways to appropriately credentialed providers and continuity of the broader multidisciplinary management plan, as outlined in the preceding section.

In New Zealand, the specialist workforce position is more constrained. The FPM-commissioned Sapere analysis estimated only about 11 full-time equivalent specialist pain medicine physicians nationally in 2016, against the internationally cited benchmark of approximately 1 per 100,000 population, or around 47 to 50 FTE, and warned of an ageing workforce and limited training throughput (Moore and Davies 2018). The 2025 NZSA SPMP Network workforce survey indicates little improvement: of 41 SPMPs with active Medical Council of New Zealand registration, approximately 35 were actively practising pain medicine, providing an estimated 8 to 10 FTE in public persistent pain clinics and about 4.5 FTE in ACC-funded services, against a recommended minimum of 50 FTE. The survey estimates a public-sector shortfall of at least 40 FTE (NZSA SPMP Network 2025).

Although SPMPs are broadly distributed in proportion to population at national level, several regions, including Northland, Tairāwhiti, Hawke's Bay, Manawatū-Whanganui, Nelson, the West Coast and Southland, had no SPMP working in their public persistent pain clinics at the time of the survey, and

Christchurch had no consistent adult public SPMP service. At least 44% of public hospitals were reported to employ non-SPMP doctors in SPMP-equivalent roles. With around one in four SPMPs intending to reduce or cease public work within five years and only six trainees nationally, the survey concludes that the workforce is at risk of further contraction without coordinated investment by Health New Zealand and ACC (NZSA SPMP Network 2025).

At the time of the 2025 NZSA SPMP Network survey, paediatric-trained specialist pain medicine physician capacity was estimated at 0.7 FTE in the North Island, all based in Auckland, and 0.2 FTE in the South Island, working in adolescent services only, with no SPMP in the Canterbury paediatric pain service. This reinforces the importance of sustainable pathways to relevant paediatric expertise (NZSA SPMP Network 2025).

Other service papers help translate these disciplines into functions. Hayes and Hodson described an integrated service involving medical staff, liaison psychiatry, clinical psychology, physiotherapy and nursing within a whole-person framework (Hayes and Hodson 2011). Davies and colleagues described STEPS as interprofessional group education delivered by clinical psychologists, occupational therapists, physical therapists and pain physicians, followed by individual review linked back to the referrer (Davies et al. 2011). Takahashi and colleagues described an inpatient multidisciplinary program in Japan delivered by orthopaedic surgeons, psychiatrists, ward nurses, physiotherapists, clinical psychologists, pharmacists and dietitians, demonstrating that intensive multidisciplinary rehabilitation can be operationalised across a broad team for highly disabled patients (Takahashi et al. 2018).

International conceptual work gives further guidance on team function. Danilov and colleagues outlined core roles for medical leadership, nursing, psychology, physiotherapy, clinical pharmacology and rehabilitation disciplines, arguing that interdisciplinary programs require regular team meetings, shared goals and explicit patient partnership (Danilov et al. 2020). Hooten and colleagues similarly emphasised that higher integration requires more than discipline availability; it depends on how disciplines share information, align incentives and co-produce care plans with patients (Hooten et al. 2024).

At service level, partnership should extend beyond individual care planning. Consumer representatives and people living with pain can contribute, where feasible and appropriate, to governance, service design, education, evaluation, interpretation of outcomes and quality-improvement priorities. Such involvement should be appropriately supported, voluntary and remunerated in accordance with local consumer-engagement policy.

Education and workforce development

Education is not simply an adjunct to multidisciplinary pain care; it is one of the mechanisms by which service quality, consistency and reach are sustained. The Australian Standards for Health Practitioner Pain Management Education describes pain education as a whole-of-workforce priority across disciplines and across the career span, while the companion implementation guide sets out practical domains for embedding contemporary evidence-based pain education within health professional learning systems (Australian Government Department of Health and Aged Care 2023a; 2023b). This policy context is especially relevant to specialist pain services because specialist pain services are natural sites for supervised learning, interprofessional capability development and modelling of care within the faculty's sociopsychobiomedical framework.

The Australian Standards for Health Practitioner Pain Management Education were led by the faculty and are intended to guide pain management education for all Australian health practitioners (Australian and New Zealand College of Anaesthetists 2026a; 2026b). This reflects interprofessional pain competencies that emphasise the multidimensional nature of pain, person-centred assessment and collaborative management (Fishman et al. 2013), alongside system-level approaches to integrated pain care situated within a biopsychosocial framework (Kerns et al. 2011). From a New Zealand perspective, the Australian Standards have not been formally adopted; however, they provide a useful reference point for aligning local pain education and service development with contemporary sociopsychobiomedical and interdisciplinary care, provided they are explicitly contextualised to Te Tiriti o Waitangi obligations, hauora Māori models of

health and New Zealand training and registration structures. Constrained New Zealand training capacity remains a rate-limiting step for translating education standards into service capability (Manatū Hauora 2022; Moore and Davies 2018).

Specialist pain services should contribute to pain education through supervision, interprofessional learning, modelling of sociopsychobiomedical and person-centred care, and support for capability development across medical, nursing, allied health and other relevant disciplines. Alignment among specialist pain services, health practitioner education providers and continuing professional development activities can strengthen access to safe, collaborative and equitable pain care.

Published service and implementation studies are consistent with this emphasis. Davies and colleagues showed that structured pre-clinic education can improve patient flow and service efficiency while reinforcing self-management principles (Davies et al. 2011). De Morgan and colleagues demonstrated that Project ECHO-based education improved clinician confidence and knowledge in community settings but also highlighted that education alone is insufficient if workforce, funding and service structures do not allow multidisciplinary practice to develop (De Morgan et al. 2024).

Consumer representatives and people living with pain can make a valuable contribution to interprofessional education by informing curriculum design, participating in teaching where appropriate, and helping services assess whether education is accessible, respectful and relevant to the experience of living with pain.

Where procedural pain management is undertaken, workforce development should include structured supervision, procedure-specific training, documented assessment of competence, credentialing and continuing professional development. Training should reinforce that procedures are integrated components of multidisciplinary pain care and should include selection, consent, risk communication, outcome evaluation, complication management and post-procedure rehabilitation planning, rather than technical performance alone.

Triage, eligibility and matching patients to multidisciplinary care

One challenge for specialist services is identifying who most needs specialist team-based care. Skjutar and colleagues addressed this directly through a Delphi study of indicators for pain rehabilitation, producing a consensus set that went well beyond pain intensity to include activity limitation, psychosocial context, work factors, fear-avoidance, medication issues, primary care context and clinician judgement (Skjutar et al. 2009). Their findings support triage systems that recognise complexity and rehabilitation need rather than relying on symptom severity alone.

Day and colleagues add a further layer by showing that outcomes from interdisciplinary pain management vary according to baseline characteristics, including age, distress and pain profile (Day et al. 2018). Their Brisbane study suggests that program matching matters and that not all patients require the same level or format of intervention. This is consistent with Tauben's stepped-care model, in which measurement should guide escalation and program intensity (Tauben 2013).

Transparent referral criteria and triage processes should consider pain intensity alongside functional limitation, sociopsychobiomedical context, medication risk, vocational factors and clinician judgement when determining the level and format of care. They should support matching of intervention intensity to patient need, with capacity to escalate care where complexity, risk, diagnostic uncertainty or disability requires individual specialist review or more intensive interdisciplinary rehabilitation.

Access, waiting times and service efficiency

Several published studies show that access processes are not peripheral to multidisciplinary pain care but central to service quality. Davies and colleagues demonstrated that a two-day STEPS pre-clinic program could reduce waiting times and recurrent service utilisation while improving active self-management and patient satisfaction (Davies et al. 2011). Hayes and Hodson reported that service redesign at HIPS was associated with a marked reduction in waiting times and a shift away from procedure-heavy care toward self-management and whole-person planning (Hayes and Hodson 2011).

The consequences of delayed access are particularly clear in the Royal Adelaide Hospital study by Burke, Mathias and Denson. In this prospective cohort of people waiting for multidisciplinary chronic pain services, prolonged waits of up to 2.5 years were associated with worsening pain interference, increasing psychological distress, reduced pain acceptance and increasing medication use, without evidence of pain relief while waiting (Burke et al. 2020). This study provides direct support for standards that address timeliness, triage, early intervention and adequate resourcing of tertiary pain services.

Access pressures are similar in New Zealand, where waiting times for tertiary pain services have ranged from 60 days to six months and, historically, around 65% of otherwise appropriate referrals to one major centre were declined because of capacity constraints, indicating substantial unmet need (Moore and Davies 2018).

Timely access to a clinically indicated procedure may be important where it has a defined diagnostic purpose, can reduce a barrier to participation in rehabilitation, or is expected to provide symptom palliation that supports function. However, access targets should not privilege procedural throughput over comprehensive assessment, appropriate patient selection or access to non-procedural multidisciplinary care. Services should monitor timeliness and equity of procedural referral pathways alongside waiting times for assessment, rehabilitation, psychology, physiotherapy and other core components of care.

Group pathways, telehealth and scalable models

A consistent theme in the literature is that multidisciplinary principles can be preserved while using more scalable delivery modes. Rajappa and colleagues evaluated a standardised group pathway within the Hunter Integrated Pain Service that included an education group, a multidisciplinary assessment and planning group, and an active group treatment phase (Rajappa et al. 2019). Outcomes were comparable to benchmark data from other specialist services, with particularly strong reductions in opioid exposure, supporting group-based pathways as a default option for selected patients rather than a lower-value substitute for individual care.

Selected patients should be identified through structured triage and medical assessment as likely to benefit from active group-based rehabilitation, without clinical features requiring urgent individual review, diagnostic clarification or higher-intensity personalised management (Skjutar et al. 2009). Assessment should extend beyond pain intensity and consider activity limitation, fear-avoidance, coping, catastrophising, mental health, medication issues, psychosocial context, work factors, motivation, recovery trajectory and clinician judgement.

This is consistent with a stepped-care approach, in which patients are matched to the least intensive intervention likely to be effective, while maintaining the capacity to escalate to specialist individual assessment or more intensive interdisciplinary rehabilitation when complexity, risk or diagnostic uncertainty is present (Tauben 2013; Kerns et al. 2011). Routine automatic allocation of all new referrals to generic low-intensity group education without structured triage is contrary to these principles.

Scriven and colleagues evaluated a telehealth ACT-based group program delivered from a hub pain service to rural Queensland spoke sites and reported improvements in pain acceptance together with high acceptability (Scriven et al. 2019). Risk and colleagues described a rural Southern NSW telehealth service linking local clinicians and a metropolitan tertiary pain service, showing strong consumer and clinician satisfaction and the feasibility of recurrent state-funded outreach multidisciplinary care (Risk et al. 2017). Digital low-intensity psychological interventions may also expand access when embedded within broader pain systems (Smith et al. 2019; Dear et al. 2018; Redpath et al. 2023).

Group programs, telehealth, shared care, outreach and digitally supported care can therefore form part of stepped and scalable pathways where multidisciplinary and interdisciplinary principles are maintained.

Program intensity and payer context

Evidence from pain management program literature suggests that treatment intensity should be matched to patient complexity rather than fixed as a single standard for all patients (Haldorsen et al. 2002; Guzman et

al. 2001). The NSW Agency for Clinical Innovation guide synthesised evidence indicating that patients with poorer prognostic profiles, greater disability and more complex psychosocial burden derive greater benefit from more intensive multidisciplinary programs, whereas those with lower disability and better prognosis may do as well in lower-intensity formats (Nicholas et al. 1992; Haldorsen et al. 2002; Guzman et al. 2001; ACI Pain Management Network 2017).

A related consideration is payer and compensation context. Studies of rehabilitation and multidisciplinary pain treatment have found that compensable patients often present with greater pain, depression and disability, and in some cohorts show smaller gains in self-reported outcomes than non-compensable patients, particularly at follow-up (Burns et al. 1995; Gatchel et al. 1997). However, this literature also indicates that compensation status alone is an inadequate basis for prognostication or exclusion. Poorer outcomes appear to be mediated or moderated by factors such as pessimistic return-to-work expectations, high baseline pain, prior pain-related surgery and reduced work participation rather than compensation status in isolation (Burns et al. 1995; Dworkin et al. 1985; Gatchel et al. 1997). Funding source, injury status or compensation pathway should not in themselves determine whether a person can access clinically appropriate interdisciplinary pain care. Although commissioning arrangements differ across jurisdictions and payers, service design should seek to preserve equitable access to assessment, rehabilitation, psychological care, medication stewardship and, where indicated, procedural pathways according to clinical need.

Inpatient, primary care and community-linked multidisciplinary models

Specialist pain services may contribute across inpatient, outpatient, primary-care and community settings. Where locally available, this may include consultation and liaison support for inpatients with complex pain, medication-related risk, diagnostic uncertainty, barriers to rehabilitation or difficult transitions of care. This role complements the admitting or treating team and is integrated with the person's broader multidisciplinary management plan. It may support coordinated assessment and goal setting, medication and procedural advice where clinically indicated, discharge planning, and linkage to appropriate outpatient, primary-care or community-based follow-up. In New Zealand, the configuration of these functions should be understood within the Level One and Level Two service architecture described above, including the role of district-based consultative clinics supported by Level One interdisciplinary pain centres (Health New Zealand | Te Whatu Ora 2024; Tauben 2013; Dorflinger et al. 2014; Kerns et al. 2011).

The literature supports integrated multidisciplinary care across care settings and demonstrates the value of structured links between specialist, primary-care and community services. Masters and colleagues described an interdisciplinary primary care spinal pain clinic based on a single joint case conference with four practitioners, with sustained outcome gains over subsequent follow-up (Masters et al. 2019). Joypaul and colleagues evaluated a PHN-commissioned multidisciplinary chronic pain program in primary care and found improvements in self-efficacy and reductions in hospitalisations, using a hybrid model that combined GP care, allied health, pharmacist review and specialist input (Joypaul et al. 2019). De Morgan and colleagues' survey of PHN-commissioned community pain programs showed that group-based, self-management-focused multidisciplinary models are feasible in Australian primary care settings, while also identifying implementation gaps related to commissioning, equity and adaptation for priority groups (De Morgan et al. 2022).

Connell and colleagues' systematic review of randomised controlled trials in primary care found that interdisciplinary chronic pain interventions can improve patient-reported pain outcomes, especially when team processes include care management, communication and structured follow-up over time (Connell et al. 2022). This suggests that accreditation standards for specialist pain units should pay attention not only to in-house service delivery but also to how units connect with and support community and primary care pathways.

Outcomes and benchmarking

A key question for specialist units is which outcomes should be measured. The literature consistently argues against relying on pain intensity alone. Tauben proposed a measurement set spanning pain intensity and interference, function, mood and risk (Tauben 2013). Takahashi and colleagues used a broad

battery that included pain, disability, anxiety, depression, self-efficacy and physical performance measures, showing improvements in pain-related disability, psychological measures, self-efficacy, quality of life and selected measures of physical function after inpatient treatment (Takahashi et al. 2018). Anamkath and colleagues found that an intensive interdisciplinary rehabilitation program for veterans improved disability, depressive symptoms and catastrophising in addition to pain outcomes (Anamkath et al. 2018).

At system scale, Tardif and colleagues analysed outcomes for 23,915 adult patients treated across 75 Australian and New Zealand specialist pain services participating in the electronic Persistent Pain Outcomes Collaboration (ePPOC) (Tardif et al. 2023). Their work showed heterogeneous end-of-episode outcomes, with roughly one-third of patients achieving relatively low symptom burden while others retained substantial pain and/or psychological distress. This is important because it supports routine participation in structured benchmarking systems and suggests that service standards should require multidimensional outcomes and stratified interpretation rather than simplistic success/failure thresholds.

Specialist pain services should participate in routine outcome measurement, benchmarking and quality-improvement activity appropriate to specialist pain practice. Assessment should be multidimensional and may include pain interference, function, psychological health, self-efficacy, participation, medication use and patient experience, in addition to pain severity where relevant. Patient- and family-reported experience, and consumer and lived-experience input, should inform interpretation of outcomes and priorities for quality improvement.

For pain procedures, audit and benchmarking should include outcomes beyond pain intensity alone, including function, participation, quality of life, medication use, adverse events, subsequent health-service utilisation and achievement of patient-defined goals. Findings should inform patient selection, clinical review, audit, rehabilitation linkage and quality improvement.

Participation in structured binational or national benchmarking systems remains an important aspirational goal for specialised pain units as contemporary, sustainable outcomes platforms are redeveloped.

Clinical registries are an important source of information for clinicians, patients and policymakers. Participation in relevant clinical registries is good clinical practice and where such registries exist, particularly in relation to the use of medical devices or new procedures, submitting relevant data to registries should be regarded as part of standard care.

Data visibility and classification of chronic pain

Chronic pain remains only partially visible in many national datasets because ICD-10 classifies pain largely through generic or site-based codes such as “other chronic pain”, “low back pain” or “pain in limb”, without consistently distinguishing chronic from acute presentations or capturing underlying mechanisms such as neuropathic or cancer-related pain (Treede et al. 2019). In practice, a substantial proportion of specialist pain clinic episodes are coded into broad “other chronic pain” or anatomical categories, masking clinical complexity and underestimating the burden of persistent pain within routine activity, diagnosis related groups (DRG) and burden-of-disease reporting. This limits the ability of health systems to track chronic pain as a condition in its own right and weakens the signal for appropriate resource allocation, service development and workforce planning.

ICD-11 introduces a dedicated chronic pain chapter that distinguishes chronic primary and chronic secondary pain and provides specific categories for common conditions such as chronic secondary musculoskeletal pain, chronic peripheral neuropathic pain and chronic cancer pain (Treede et al. 2019). Comparative coding studies show that applying ICD-11 to existing pain service cohorts redistributes patients from generic “other” categories into these more specific diagnoses, substantially improving the granularity and usefulness of health statistics for clinical planning and policy (Barke et al. 2021). For specialist pain services, this means that efforts to improve system-level visibility of pain should include high-quality mapping from rich clinical terminology such as SNOMED CT to ICD, and progressive implementation of ICD-11 so that the complexity of chronic pain captured in clinical records is preserved in coded data used for reporting, funding and service planning.

The timing and sequencing of ICD-11 implementation will be determined by national coding authorities and may differ across jurisdictions, but chronic pain services should engage early in planning so that the new chronic pain categories are adopted as local systems transition.

Economic value and system sustainability

Specialist multidisciplinary care is often challenged on cost grounds, but the cost questions must be considered alongside downstream healthcare utilisation, work participation and the costs of fragmented care. Robbins and colleagues showed that compromising program integrity through payer carve-outs weakened outcomes, implying that apparent short-term savings may reduce overall value (Robbins et al. 2003). Pilitsis and colleagues argued from a systems perspective that multidisciplinary clinics can reduce fragmented, high-cost care by integrating rehabilitation, behavioural care, medication management and procedures under clearer entry criteria and closer payer-provider alignment (Pilitsis et al. 2021). In Australia, workforce modelling and service reviews consistently describe projected specialist shortfalls, marked rural and regional undersupply, and prolonged waiting times for multidisciplinary pain services, indicating that current capacity is insufficient to meet population need and that inefficiencies from delayed or fragmented care are already identifiable (WA Department of Health 2015; Hogg et al. 2012; Hogg et al. 2021).

Funding and commissioning should also support timely and equitable access to clinically indicated procedural pathways, whether provided directly or through formal shared-care arrangements.

The value of procedural care should be assessed within the whole service pathway rather than through procedure volume alone. A procedure that enables participation in rehabilitation, medication reduction, return to valued activity or avoidance of higher-risk care may offer value for an appropriately selected person; conversely, poorly targeted or weakly integrated procedures may add cost without improving meaningful outcomes.

Chowdhury and colleagues provided one of the most directly relevant economic evaluations for a tertiary interdisciplinary pain program. In patients completing the ADAPT program, improvements in pain-related outcomes occurred alongside reduced healthcare utilisation and changes in work participation, allowing calculation of costs per clinically meaningful improvement in pain interference and self-efficacy (Chowdhury et al. 2022). These findings are consistent with broader evidence that comprehensive multidisciplinary pain programs can be both clinically effective and cost-effective compared with fragmented or purely unimodal medical care, particularly when productivity gains and reductions in high-cost utilisation are included in the analysis (Turk 2006; Bendix et al. 2001).

Equity, culture and underserved populations

Specialist pain services should also address equity. Telehealth studies such as those by Scriven and Risk show practical strategies to reduce rural and remote disadvantage (Scriven et al. 2019; Risk et al. 2017). Bindicsova and colleagues, in interviews with Australian consumers and consumer representatives, found that people living with chronic pain identified cost, waitlists, rurality, poor GP training, over-reliance on biomedical and opioid approaches, mental health burden and poor access to non-pharmacological care as major system failures (Bindicsova et al. 2023).

Service design should seek to reduce inequities affecting Aboriginal and Torres Strait Islander peoples, Māori, Pacific peoples, people living in rural and remote communities, and people affected by other forms of disadvantage. In New Zealand, service design and delivery should be consistent with obligations under Te Tiriti o Waitangi, including partnership with Māori and culturally safe care informed by Māori models of health such as Te Whare Tapa Whā.

Mowat and colleagues add an important New Zealand perspective. In a prospective cohort of patients attending an inpatient multidisciplinary pain program, clinically meaningful short-term improvements were observed overall, but outcomes varied by sex, employment status, diagnosis and ethnicity, with Māori participants experiencing poorer three-month outcomes despite inclusion of Te Whare Tapa Whā concepts (Mowat et al. 2022).

This supports culturally responsive design, outcome monitoring by population group and post-discharge supports that help sustain gains equitably.

In New Zealand, Māori experience a higher prevalence of chronic pain than non-Māori and present to specialist services with higher pain, disability, psychological distress and pain-related fear, and lower self-efficacy (Burri et al. 2018). Kaiāwhina describe primary care pain management for Māori as over-reliant on medication, with urgent need for health-literacy approaches and limited referral pathways to specialist services (Devan et al. 2021).

Education, implementation and system development

Multidisciplinary pain care also depends on implementation supports beyond the clinic itself. De Morgan and colleagues evaluated the South Australian Chronic Pain ECHO Network and found that a 10-session hub-and-spoke education model could improve clinician confidence, knowledge and intention to practice biopsychosocial pain care, especially in regional settings (De Morgan et al. 2024). However, participants also described funding and team-formation barriers that limited translation of education into real multidisciplinary practice. This suggests that professional standards should be paired with policy and funding reform if workforce capability is to become service capacity.

The ASEAN review by Chaudakshetrin and colleagues illustrates how multidisciplinary pain-management clinics and training programs can be built through local champions, professional societies, ministries and context-sensitive implementation (Chaudakshetrin et al. 2020).

Alignment with related professional documents

Across Australian states and New Zealand, specialist pain services operate within differing policy, commissioning and service specification frameworks. This background paper does not attempt a jurisdiction-by-jurisdiction description, but recognises that state and national frameworks, for example clinical innovation agencies, service specifications and purchasing contracts, are key local drivers of service design.

Any foreground statement and supporting background paper on multidisciplinary pain units should remain aligned with the broader professional document suite of the Faculty of Pain Medicine and its parent college. Rather than reproducing detailed clinical standards or medication guidance, this paper assumes and reinforces the principle that specialist pain practice is grounded in coordinated, whole-person care, with procedures and pharmacotherapy delivered within appropriate multidisciplinary assessment, risk management and review processes.

The FPM Procedures in Pain Medicine Clinical Care Standard, PS11(PM), should be read alongside this background paper and the accompanying position statement where specialist pain services consider, provide, refer for or review diagnostic and therapeutic pain procedures. PS17(PM) does not duplicate PS11(PM); rather, it locates procedures within the broader multidisciplinary and interdisciplinary model of care and emphasises integrated pathways, whole-person goals and continuity between procedural and non-procedural management.

The Australian Standards for Health Practitioner Pain Management Education are particularly important because they connect service expectations with FPM-led national work on pain capability and workforce development (Australian and New Zealand College of Anaesthetists 2026a; 2026b). For New Zealand, this background paper should be read alongside national service specifications and purchasing arrangements for chronic pain care, including the Health New Zealand | Te Whatu Ora Pain Management Service Specification (Tier Two) and the proposed Mamaenga roa Model of Care for people living with chronic pain. ACC separately purchases pain management services for injury-related pain under its own contract and service levels, which are structured differently from the Health New Zealand specification (ACC 2026). The standards described in this paper are intended to apply irrespective of funder

Implications for specialist pain services

Taken together, the published literature supports several propositions relevant to an FPM background paper.

1. Multidisciplinary and especially interdisciplinary pain care should be regarded as foundational to specialist pain services within a culturally safe, sociopsychobiomedical framework. Coordinated sociopsychobiomedical programs improve outcomes more reliably than fragmented or unimodal care (Stanos and Houle 2006; Robbins et al. 2003).
2. Standards should specify structures and processes that make interdisciplinary care real, including core disciplinary capability, shared formulation, team review, active rehabilitation, volume and intensity of input, outcome measurement and links with primary and community care (Danilov et al. 2020; Kaiser et al. 2013; Tauben 2013).
3. Standards should address timeliness, triage and scalable pathways. Australian studies show that group education, standardised pathways, telehealth and low-intensity stepped interventions can improve access without abandoning multidisciplinary principles (Davies et al. 2011; Rajappa et al. 2019; Scriven et al. 2019; Risk et al. 2017; Smith et al. 2019; Dear et al. 2018; Redpath et al. 2023).
4. Benchmarking and multidimensional outcome measurement should be built into accreditation expectations, drawing on models such as ePPOC and the VA IPRP evaluation framework (Tardif et al. 2023; Haun et al. 2025).
5. Workforce, education, funding and equity should be treated as core enablers rather than peripheral issues, because access barriers, misaligned payment, underdeveloped teams and culturally unsafe or geographically limited services directly weaken pain care quality (Burke et al. 2015; Burke et al. 2020; Joypaul et al. 2019; Chowdhury et al. 2022; Bindicsova et al. 2023; Mowat et al. 2022; De Morgan et al. 2024).
6. A philosophy of patient-centred care should operate at both clinical and service levels, with appropriately supported opportunities for consumer representatives and people living with pain to contribute to service design, education, evaluation and quality improvement. (Danilov et al. 2020; Hooten et al. 2024; Bindicsova et al. 2023).
7. Service standards and workforce planning should account for children and young people, including access to developmentally appropriate child- and family-centred interdisciplinary care and relevant paediatric expertise. (NZSA SPMP Network 2025).
8. Appropriately indicated diagnostic and therapeutic procedures may be important components of specialist pain care for selected patients, but should be integrated within an individualised multidisciplinary management plan. Services should maintain timely, appropriately governed access to relevant procedural expertise through direct capability and/or formal referral and shared-care networks, consistent with PS11(PM) and applicable standards (ANZCA FPM 2020; APS 2010; IASP 2021).

References

1. Accident Compensation Corporation. Service schedule for pain management services (community and tertiary). Wellington: ACC; 2026.
2. Accident Compensation Corporation. Turnaround action plan and long-term claims reporting documents. Wellington: ACC; 2025-2026.
3. Agency for Clinical Innovation Pain Management Network. Which patient for which program? A guide for NSW Tier 3 and Tier 2 public health facilities providing pain programs for adults. Sydney: ACI; 2017. [NEW]
4. Anamkath NS, Palyo SA, Jacobs SC, Lartigue A, Schopmeyer K, Strigo IA. An interdisciplinary pain rehabilitation program for veterans with chronic pain: description and initial evaluation of outcomes. *Pain Res Manag*. 2018;2018:1-9.

5. Australian and New Zealand College of Anaesthetists Faculty of Pain Medicine. Procedures in Pain Medicine Clinical Care Standard. PS11(PM). Melbourne: ANZCA; 2020.
6. Australian and New Zealand College of Anaesthetists. Standards for pain medicine. Melbourne: ANZCA; 2024. [NEW]
7. Australian and New Zealand College of Anaesthetists. Australian standards for health practitioner pain management education and accompanying implementation materials. Melbourne: ANZCA; 2026.
8. Australian and New Zealand College of Anaesthetists. First national standards for pain management education. Melbourne: ANZCA; 2026. [NEW]
9. Australian and New Zealand College of Anaesthetists. Professional documents monthly update. Melbourne: ANZCA; 2026. [NEW]
10. Australian and New Zealand College of Anaesthetists. Professional documents. Melbourne: ANZCA; 2026. [NEW]
11. Australian and New Zealand College of Anaesthetists. Pain-sector full statement on the decommissioning of ePPOC. Melbourne: ANZCA; 2026.
12. Australian Government Department of Health. Pain medicine: 2016 factsheet. Canberra: Department of Health; 2017.
13. Australian Government Department of Health. National Strategic Action Plan for Pain Management. Canberra: Commonwealth of Australia; 2019.
14. Australian Government Department of Health and Aged Care. National Strategy for Health Practitioner Pain Management Education. Canberra: Commonwealth of Australia; 2023.
15. Australian Government Department of Health and Aged Care. National Strategy for Health Practitioner Pain Management Education: implementation guide. Canberra: Commonwealth of Australia; 2023.
16. Australian Pain Society. The Australian Pain Society Position Statement on the Role of, and Standards for, Interventional Pain Management Procedures. Sydney: Australian Pain Society; 2010.
17. Barke A, Korwisi B, Jakob R, Rief W. Classification of chronic pain in the International Classification of Diseases (ICD-11): a field study on reliability and applicability. *Pain*. 2021;162(7):1930-40.
18. Bean DJ, Dryland A, Rashid U, Tuck NL. The determinants and effects of chronic pain stigma: a mixed-methods study and the development of a model. *J Pain*. 2022;23(12):2086-99.
19. Bendix AE, Bendix T, Hastrup C, Busch E. A prospective, randomized 5-year follow-up study of functional restoration in chronic low back pain patients. *Eur Spine J*. 2001;10(1):22-8.
20. Bindicsova I, Deane M, et al. An in-depth exploration of consumer and consumer representative views on chronic pain treatment in Australia. *J Pain Palliat Care Pharmacother*. 2023.
21. Blyth FM, Huckel Schneider C, et al. The National Strategic Action Plan for Pain Management: a policy response to chronic pain in Australia. *Med J Aust*. 2020. [NEW]
22. Burke ALJ, Denson LA, Mathias JL, Hogg MN. An analysis of multidisciplinary staffing levels and clinical activity in Australian tertiary persistent pain services. *Pain Med*. 2015.
23. Burke ALJ, Mathias JL, Denson LA. Waiting for multidisciplinary chronic pain services: a prospective study over 2.5 years. *J Health Psychol*. 2020;25(9):1198-212.

24. Burri A, Rice D, Kluger N, Kluger M. Ethnic and sex differences in pain characteristics, psychological distress and pain-related disability in patients attending a New Zealand tertiary pain service. *N Z Med J*. 2018;131(1477):21-37.
25. Burns JW, Sherman ML, Devine J, Mahoney N, Pawl R. Association between workers' compensation and outcome following multidisciplinary treatment for chronic pain: roles of mediators and moderators. *Clin J Pain*. 1995;11(2):94-102.
26. Canadian Agency for Drugs and Technologies in Health. Multidisciplinary treatment programs for patients with acute or subacute pain: a review of clinical effectiveness, cost-effectiveness, and guidelines. Ottawa: CADTH; 2019.
27. Chaudakshetrin P, et al. Establishment of multidisciplinary pain management clinics and training programs in member countries of the Association of Southeast Asian Pain Societies. *Pain*. 2020;161 Suppl 1:Sxx-Sxx.
28. Chowdhury AR, Schofield D, Shrestha R, Nicholas M. Economic analysis of patient-related effects of an interdisciplinary pain self-management program. *Aust Health Rev*. 2022;46(6):686-94.
29. Connell NB, Prathivadi P, Lorenz KA, Zupanc SN, Singer SJ, Krebs EE, et al. Teaming in interdisciplinary chronic pain management interventions in primary care: a systematic review of randomized controlled trials. *J Gen Intern Med*. 2022.
30. Danilov A, Barulin A, Kurushina O, Latysheva N. Interdisciplinary approach to chronic pain management. *Postgrad Med*. 2020.
31. Davies S, Quintner J, Parsons R, Parkitny L, Knight P, Forrester E, et al. Preclinic group education sessions reduce waiting times and costs at public pain medicine units. *Pain Med*. 2011.
32. Dear BF, Nicholson Perry K, Siddall P, Middleton JW, Johnson J, Katte L, et al. The Pain Course: exploring the feasibility of an internet-delivered pain management program for adults with spinal cord injury. *Spinal Cord*. 2018.
33. Dear BF, et al. Cost-effectiveness of internet-delivered pain management programs. 2021.
34. De Morgan S, Walker P, Blyth FM, Nicholas M, Wilson A. Community-based pain programs commissioned by primary health networks: key findings from an online survey and consultation with program managers. *Aust J Prim Health*. 2022;28(4):303-14.
35. De Morgan S, Walker P, Blyth FM, Daly A, Burke ALJ, Nicholas MK, et al. A technology-enabled collaborative learning model to upskill primary care providers in best practice pain care. *Aust J Prim Health*. 2024;30:PY24035.
36. Devan H, Jones B, Davies C, Perry MA, Hale L, Grainger R, et al. Kaiāwhina Māori health workers' perspectives on pain management for Māori. *N Z Med J*. 2021.
37. Dorflinger LM, Ruser C, Sellinger J, Edens EL, Kerns RD, Becker WC. Integrating interdisciplinary pain management into primary care: development and implementation of a novel clinical program. *Pain Med*. 2014.
38. Dworkin RH, Handlin DS, Richlin DM, Brand L, Vannucci C. Unraveling the effects of compensation, litigation, and employment on treatment response in chronic pain. *Pain*. 1985;23(1):49-59.
39. Fishman SM, Young HM, Arwood EL, Chou R, Herr K, Murinson BB, et al. Core competencies for pain management: results of an interprofessional consensus summit. *Pain Med*. 2013;14(7):971-81.

40. Gatchel RJ, Polatin PB, Mayer TG, Garcy PD, Robinson RC, Mooney V. The effect of compensation involvement on the reporting of pain and disability by patients referred for rehabilitation of chronic low back pain. *Spine (Phila Pa 1976)*. 1997;22(17):2016-24.
41. Guzman J, Esmail R, Karjalainen K, Malmivaara A, Irvin E, Bombardier C. Multidisciplinary rehabilitation for chronic low back pain: systematic review. *BMJ*. 2001;322(7301):1511-6.
42. Haun JN, Fowler CA, French DD, McHugh MC, Heuer JN, Ballistrea LM, Benzinger RC, et al. Characterization and evaluation of Department of Veterans Affairs Commission on Accreditation of Rehabilitation Facilities-accredited interdisciplinary pain rehabilitation programs: protocol for a mixed methods program evaluation. *JMIR Res Protoc*. 2025;14:e72091. [NEW]
43. Haldorsen EMH, Grasdal AL, Skouen JS, Risa AE, Kronholm K, Ursin H. Is there a right treatment for a particular patient group? Comparison of ordinary treatment, light multidisciplinary treatment, and extensive multidisciplinary treatment for long-term sick-listed employees with musculoskeletal pain. *Pain*. 2002;95(1-2):49-63.
44. Hayes C, Hodson FJ. A whole-person model of care for persistent pain: from conceptual framework to practical application. *Pain Med*. 2011.
45. Health New Zealand | Te Whatu Ora. Pain Management Service Specification (Tier Two). 2024.
46. Health New Zealand | Te Whatu Ora. Pain Management Service Specification: Specialist Medical and Surgical Services, Tier Two. Wellington: Health New Zealand; 2024.
47. Hogg MN, Gibson S, Helou A, DeGabriele J, Farrell MJ. Waiting in pain: a systematic investigation into the provision of persistent pain services in Australia. *Med J Aust*. 2012;196(6):386-90.
48. Hogg MN, Kavanagh A, Farrell MJ, Burke ALJ. Waiting in Pain II: an updated review of the provision of persistent pain services in Australia. *Pain Med*. 2021;22(6):677-85.
49. Hooten WM, et al. Integrated pain care models and the importance of aligning stakeholder values. 2024. [NEW] International Association for the Study of Pain. Pain Treatment Services. Washington, DC: IASP; 2009.
50. International Association for the Study of Pain. Multidisciplinary Pain Center Development Manual. Washington, DC: IASP; 2021.
51. Institute of Medicine. Relieving pain in America: a blueprint for transforming prevention, care, education, and research. Washington (DC): National Academies Press; 2011.
52. Joypaul S, Kelly F, McMillan SS, King MA. Turning Pain into Gain: evaluation of a multidisciplinary chronic pain management program in primary care. *Pain Med*. 2019;20(5):925-33.
53. Kaiser U, Arnold B, Pfingsten M, Nagel B, Lutz J, Sabatowski R. Multidisciplinary pain management programs. *J Pain Res*. 2013.
54. Kerns RD, Philip EJ, Lee AW, Rosenberger PH. Implementation of the Veterans Health Administration national stepped care model for pain management. *Pain Med*. 2011;12(7):1094-9.
55. Manatū Hauora - Ministry of Health, Office of the Chief Clinical Officers. Mamaenga roa: Model of Care for people living with chronic pain. Wellington: Ministry of Health; 2022.
56. Masters S, Lind R, Bryant C, Carr S. Interdisciplinary primary care spinal pain clinic: a clinical audit. *Aust J Gen Pract*. 2019;48(8):547-52.
57. Moore D, Davies P. The problem of chronic pain and scope for improvements in patient outcomes. Wellington: Sapere Research Group; 2018. [NEW]

58. Mowat RM, Lewis GN, Borotkanics RJ. What factors predict outcome from an inpatient multidisciplinary chronic pain service? A prospective cohort study. *Pain*. 2022.
59. Nicholas MK, Wilson PH, Goyen J. Comparison of cognitive-behavioural group treatment and an alternative non-psychological treatment for chronic low back pain. *Pain*. 1992;48:339-47.
60. Nicholas MK, et al. Work-focused cognitive behavioural and functional restoration approaches for chronic pain. 2002.
61. New Zealand Society of Anaesthetists Specialist Pain Medicine Physicians Network. Specialist pain medicine physician workforce survey report. Wellington: NZSA; 2025.
62. Pilitsis JG, Khazen O, Wenzel NG. Multidisciplinary firms and the treatment of chronic pain: a case study of low back pain. *Front Pain Res (Lausanne)*. 2021;2:781433.
63. Rajappa H, Wilson M, White R, Blanchard M, Tardif H, Hayes C. Prioritizing a sequence of short-duration groups as the standardized pathway for chronic noncancer pain at an Australian tertiary multidisciplinary pain service: preliminary outcomes. *Pain Rep*. 2019;4(5):e780.
64. RACGP. Management of chronic pain in a rural Australian setting. *Aust J Gen Pract*. 2024. [NEW]
65. Redpath P, Searle A, Wall C, Venning A, Oswald T, Glover F, Herriot P. Guided self-help for people with chronic pain: integrated care in a public tertiary pain clinic-a pilot study. *Pain Ther*. 2023. [NEW]
66. Risk M, Strong J, Williams J, et al. Establishing a rural and remote interdisciplinary pain service via telehealth: the Southern NSW experience. 2017.
67. Robbins H, Gatchel RJ, Noe C, Gajraj N, Polatin P, Deschner M, et al. A prospective one-year outcome study of interdisciplinary chronic pain management: compromising its efficacy by managed care policies. *Anesth Analg*. 2003.
68. Royal Australian College of General Practitioners. Management of chronic pain in a rural Australian setting. *Aust J Gen Pract*. 2024.
69. Scriven H, Doherty DP, Ward EC. Evaluation of a multisite telehealth group model for persistent pain management for rural/remote participants. *Rural Remote Health*. 2019;19(1):4710.
70. Skjelbred B, et al. The economic burden of chronic pain across Europe. 2020.
71. Skjutar Å, Christensson K, Müllersdorf M. Exploring indicators for pain rehabilitation: a Delphi study using a multidisciplinary expert panel. *Musculoskeletal Care*. 2009;7(4):227-42.
72. Smith J, Faux SG, Gardner T, Hobbs MJ, James MA, Joubert AE, et al. Reboot Online: a randomized controlled trial comparing an online multidisciplinary pain management program with usual care for chronic pain. *Pain Med*. 2019;20(12):2385-96.
73. Stanos S, Houle TT. Multidisciplinary and interdisciplinary management of chronic pain. *Phys Med Rehabil Clin N Am*. 2006.
74. Tauben D. Measurement-based stepped-care approach to interdisciplinary chronic pain management. In: Benzon HT, Rathmell JP, Wu CL, Turk DC, Argoff CE, Hurley RW, editors. *Practical management of pain*. 5th ed. Philadelphia: Elsevier; 2013.
75. Takahashi N, Kasahara S, Yabuki S. Development and implementation of an inpatient multidisciplinary pain management program for patients with intractable chronic musculoskeletal pain in Japan: preliminary report. *J Pain Res*. 2018;11:2015-21.
76. Tardif H, et al. Patterns of patient outcomes following specialist pain management in Australasia. *Pain*. 2023;164(11):2491-500.

77. Treede RD, Rief W, Barke A, Aziz Q, Bennett MI, Benoliel R, et al. Chronic pain as a symptom or a disease: the IASP Classification of Chronic Pain for ICD-11. *Pain*. 2019;160(1):19-27.
78. Turk DC. Clinical effectiveness and cost-effectiveness of treatments for patients with chronic pain. *Clin J Pain*. 2006.
79. Victorian Department of Health. Persistent or chronic primary pain: statewide referral criteria. Melbourne: State Government of Victoria; 2025.
80. WA Department of Health. Pain medicine: specialty workforce capacity program summary. Perth: Government of Western Australia; 2015.
81. WA Department of Health. WA framework for persistent pain 2016-2021. Perth: Government of Western Australia; 2016.
82. Yang SY, Bogosian A, Moss-Morris R, McCracken LM. Healthcare professionals' perceptions of psychological treatment for chronic pain in Singapore: challenges, barriers, and the way forward. *Disabil Rehabil*. 2016;38(26):2551-6.

Document development group

Dr Irina Hollington, FANZCA FFPMANZCA (Lead)
 Dr Christopher Rumball, FAFOM (RACP) FFPMANZCA (Co-lead)
 Dr Harold Eeman, FAFRM (RACP) FFPMANZCA
 Dr Cillian Suiter, FANZCA FFPMANZCA
 A/Prof Michael Vagg, FAFRM(RACP) FFPMANZCA (DPA FPM PA)
 Dr Dilip Kapur, FANZCA FFPMANZCA (DPA FPM PA)

Faculty of Pain Medicine professional documents

POLICY – A document that formally states principle, plan and/or course of action that is prescriptive and mandatory.

STATEMENT – A document that describes where the college stands on a particular issue. This may include areas that lack clarity or where opinions vary. A statement is not prescriptive.

GUIDELINE – A document that offers advice on a particular subject, ideally based on best practice recommendations and information, available evidence and/or expert consensus. A guideline is not prescriptive.

This document has been prepared having regard to general circumstances, and it is the responsibility of the practitioner to have express regard to the particular circumstances of each case, and the application of this policy document in each case.

Professional documents are reviewed from time to time, and it is the responsibility of the practitioner to ensure that the practitioner has obtained the current version. Professional documents have been prepared having regard to the information available at the time of their preparation, and the practitioner should therefore have regard to any information, research or material which may have been published or become available subsequently.

Whilst the College and Faculty endeavours to ensure that documents are as current as possible at the time of their preparation, they take no responsibility for matters arising from changed circumstances or information or material which may have become available subsequently.

Promulgated: October 2026
 Date of current document: October 2026

© Copyright 2026 – Faculty of Pain Medicine, Australian and New Zealand College of Anaesthetists

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from ANZCA. Requests and inquiries concerning reproduction and rights should be addressed to the Chief Executive Officer, Australian and New Zealand College of Anaesthetists, 630 St Kilda Road, Melbourne, Victoria 3004, Australia. Email: ceoanzca@anzca.edu.au

Website: www.anzca.edu.au