



Pain Service Status	Number of Patients
PC Start	0
PC Consultant End	0
PC Other Tx End	0
PM Assessment	0
Group Start	0
Group End	0
PM Other Tx End	0
Blank	145

Visits to GP/Hospital (related to pain)				
Question	Mean	SD	Minimum	Maximum
GP Visits (past 3 months)	3	3	0	12
GP Visits - Emergency Call Outs (past 3 months)	0	1	0	7
Hospital Visits	0	1	0	4

Referral	Number of Patients
GP	13
Pain Clinic	0
Other - Rheumatology	0
Blank	143

EuroQol five dimensions questionnaire (EQ-5D)		
Dimension	Mean	SD
Mobility	2.9	1.0
Self-Care	2.1	1.0
Usual Activities	3.4	1.0
Pain/Discomfort	3.8	0.8
Anxiety/Depression	2.7	1.3
Total Score	13.9	5.0



Pain Self-Efficacy Questionnaire (PSEQ)		
Question	Mean	SD
1. Enjoy Life	2.7	1.6
2. Household Chores	2.9	1.8
3. Socialise	2.5	1.8
4. Coping	2.7	1.6
5. Can do some work	2.9	1.8
6. Still participate in things I enjoy	2.2	1.6
7. Cope with pain without medication	0.9	1.4
8. Accomplish goals in life	1.9	1.6
9. Lead a normal life	2.0	1.6
10. Gradually become more active	2.0	1.6
Total Score	21.1	13.8

Pain Catastrophising Scale (PCS)		
Question	Mean	SD
1. Worry when will pain end	2.7	1.2
2. Can't go on	1.6	1.4
3. Never will get better	2.6	1.3
4. Overwhelming	2.3	1.3
5. Can't stand it	2.2	1.3
6. Afraid pain will get worse	2.5	1.4
7. Thinking of other painful experiences	0.9	1.2
8. Anxious - want pain to end	2.8	1.4
9. Can't stop thinking about it	2.4	1.3
10. Thinking about how much it hurts	2.2	1.3
11. Thinking about the pain stopping	2.5	1.3
12. Nothing will make the pain better	2.3	1.4
13. Wonder if something serious will happen	1.7	1.5
Total Score (Rumination)	11.8	7.3
Total Score (Magnification)	4.5	3.6
Total Score (Helplessness)	8.8	5.3

Instrument	Mean Score	SD
Brief Pain Inventory	72.3	23.7
HADS Anxiety	9.9	5.1
HADS Depression	10.3	4.9
Tampa Scale of Kinesiophobia (TSK)	29.5	12.0



Brief Pain Inventory (BPI)		
Item	Mean Score	SD
Worst	7.6	1.7
Least	5.1	2.5
Average	6.9	1.9
Now	6.7	2.2
General Activity	7.3	2.1
Mood	7.1	2.6
Walking Ability	6.9	2.8
Normal Work	7.9	6.1
Relationships	6.2	2.9
Sleep	6.9	2.8
Enjoyment of Life	7.4	2.3

HADS Anxiety Score		
Item	Mean Score	SD
Tense/Wound Up	1.9	0.9
Frightened	1.4	1.1
Worrying	1.6	1.1
Relaxed	1.8	0.9
Butterflies	1.0	1.0
Restless	1.5	1.0
Panic	1.2	1.0



HADS Depression		
Item	Mean Score	SD
Enjoyment of Life	1.8	1.0
Laugh	1.2	1.0
Cheerful	1.3	1.0
Slowed Down	2.4	0.8
Lost Interest in Appearance	1.2	1.0
Look Forward	1.7	1.0
Enjoy Book/TV Radio	1.1	1.1



Tampa Scale of Kinesiophobia (TSK)		
Item	Mean Score	SD
Afraid of Injury (Exercise)	2.8	1.1
Increased Pain	3.1	1.0
Something is wrong	2.7	1.0
Medical Condition not taken seriously	2.7	1.1
Body at risk for lifetime	2.4	1.2
Pain Equals Injury	2.4	1.0
Afraid of Injury	2.5	1.1
Avoid Dangerous Movements	2.9	1.0
Pain Related to Inner Symptoms	2.7	1.0
Pain Equals Stop Exercising	2.8	1.0
Not Safe to Exercise	2.2	0.9
Can't Take Part in Normal Activities	2.8	2.8
Shouldn't be forced to exercise when in pain	2.4	1.0

5) Conclusions

Both services collect similar data regarding pain, patient's involvement with services and the outcome measures used, although the Pain Service collects more information on patient demographics such as age, gender, education, work and living status. It may be expected that patient information from the Pain Service is linked to the Pain Management Programme data. During the data collection exercise in the Pain Service many questionnaire packs did not have patient identifiable information on it, preventing clinicians mapping these on to patients. It was also clear from patient responses that there was a lack of understanding of how to complete the questionnaires, more guidance from clinicians may be needed.

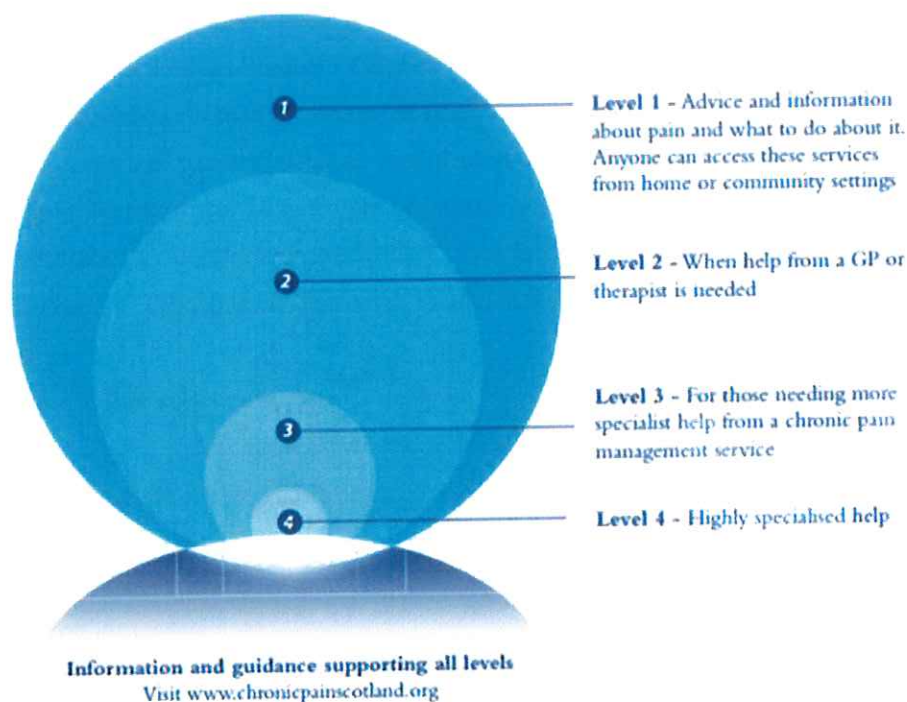
Appendix 4 – Draft Quality Performance Indicators (QPIs)

In accordance with the objectives of the original proposal, collated information from research across the country and a literature review was used to develop recommendations for service improvement. The QPIs have been modelled against the four levels of the Scottish Service Model (Figure 1).

Quality Performance Indicators (QPIs) are a set of standards used to measure and monitor chronic pain data in Scotland. The aim of QPIs is to drive continuous quality improvement in the care of patients with chronic pain. QPIs are designed to be clear and measurable, based on sound clinical evidence whilst also taking into account other recognised standards and guidelines. The main source of evidence for these QPIs is SIGN 136 and the National Prescribing Strategy (which is in its final stages).

The QPIs will undergo a formal and rigorous consultation process with feedback welcome on all areas, specifically attainable and realistic targets for each indicator.

Figure 1: Scottish Service Model for Chronic Pain



QPI 1 – Pain Education (Levels 1-4)

QPI Title:	Pain Education (Levels 1-4)
Description:	Patients attending an NHS service that provides chronic pain treatment should have access to advice and information about pain. Pain information should be accessible and might take the format of signposting to relevant services, literature and/or pain education sessions. Clear (legible, audible, understandable) information should include information pertaining to types of pain, coping mechanisms, dealing with sleep and anxiety and the origins of pain. Information should also be provided on exercise and self-management. Where appropriate, this should be provided or signposted in languages other than English.
Rationale and Evidence:	An RCT conducted by Little et al. (2001) found that providing educational booklets and exercise advice to patients with lower back pain can increase satisfaction and moderately improve functional outcomes. SIGN 136 recommends pain information sessions as safe, low technology, community based and affordable interventions to help patients better manage their condition (Scottish Intercollegiate Guidelines Network, 2013). Pain education programmes have been found to increase chronic low back pain patients' likelihood of achieving their goals and can result in significant behaviour changes (LeFort et al., 1998, Trouvin et al., 2016). A decrease in pain can also be found following these programmes as well as physiological improvements (Trouvin et al., 2016), though these tend to be short-term improvements (LeFort et al., 1998). Pain neurophysiology education has been shown to be effective in conjunction with other pain management approaches (Geneen et al., 2015).
Specifications:	Numerator: Number of NHS services making information about chronic pain available (including visible signposting relevant to pain education). Denominator: Number of NHS services providing chronic pain treatment Exclusions: No exclusions.
Target	Each service provides information about chronic pain.

QPI 2 – Outcome Measures (Levels 2-4)

QPI Title:	Outcome Measures (Levels 2-4)
Description:	<p>Patients being treated for chronic pain should be administered relevant outcome measures at the beginning of treatment and at least once after treatment to gauge process (minimum 6 weeks, maximum one year).</p> <p>Health professionals are advised to record the following core minimum data:</p> <ol style="list-style-type: none"> 1) Age 2) Gender 3) Pain Site(s): List of Body Parts. 4) Pain Duration: Categorised list 5) Pain Severity: Question 1 of the Chronic Pain Grade Questionnaire (CPG) (Smith et al., 1997). 6) Underlying Diagnosis: Map to ICD-11 (develop Read code/SNOMED) 7) Emotional Impact: Patient Health Questionnaire-2 (PHQ-2) (Kroenke et al., 2014). 8) Functional Impact: Question 5 of the Chronic Pain Grade Questionnaire (CPG) (Smith et al., 1997). No conclusive evidence exists regarding a single self-report physical activity questionnaire (Silsbury et al., 2015). 9) Health-Related Quality of Life: Question 1 of the Short Form Health Survey (SF-36). <p>The same set of measures completed during and after treatment (if possible) allows assessment of progress since treatment began.</p>
Rationale and Evidence:	<p>Repeating relevant measures before and after treatment is a central tenet of patient care, facilitates audit and allows service evaluation and improvement. SIGN 136 states that health professionals should assess a chronic pain patient's history, pain type, severity and functional impact. An examination and biopsychosocial assessment should also be completed in order to inform treatment selection (Scottish Intercollegiate Guidelines Network, 2013).</p>
Specifications:	<p>Numerator: Number of patients being treated for chronic pain who have the recommended data recorded at least once. (In Level 3 and 4 services, this means all patients; in Level 2</p>

	<p>services it is more complex to identify these patients, and this may require specified Read codes, or setting prescribing parameters).</p> <p>Denominator: All patients being treated for chronic pain.</p> <p>Exclusions: Patients with chronic pain already assessed and are who stable (i.e. accessing the same prescriptions for at least a year), or who decline to complete relevant measures.</p>
Target	<p>90% of patients have at least 50% of the recommended data recorded at least once.</p> <p>75% have 100% of the recommended data recorded at least once.</p> <p>50% have at least 50% of the recommended data recorded at least twice in the previous 18 months.</p>

QPI 3 – Pharmacy Review (Level 2-4)

QPI Title:	Pharmacy Review (Levels 2-4)
Description:	Patients prescribed medication for chronic pain should have their medication reviewed at least annually by their GP, Nurse, Pharmacist or Allied Health Professional, or within their specialist pain clinic.
Rationale and Evidence:	<p>SIGN 136 states that an individual’s success in pharmacological treatments is dependent on regular, scheduled re-assessment of pain relief and side effects (Scottish Intercollegiate Guidelines Network, 2013). It has also been found that if an individual has not responded to treatment after two to four weeks after titration to an adequate dose, then they are unlikely to develop a response thereafter (Scottish Intercollegiate Guidelines Network, 2013). SIGN 136 recommends several key areas to include in an audit including:</p> <ul style="list-style-type: none"> - The number of patients using analgesics to manage chronic pain who receive annual review. - The number of patients using strong opioids and gabapentinoids who receive an annual review of their medications. <p>More recent guidance (Scottish Government, 2017b) found that across Scotland, the number of patients on daily morphine equivalent doses of 50mg or above is roughly 6 per 1000 list size. Clinicians should ensure these patients are reviewed at least annually.</p> <p>Key recommendations from the “Quality Prescribing for Chronic Pain: A Guide for Improvement” (Scottish Government, 2017b) are:</p> <ul style="list-style-type: none"> - Clinicians should review effectiveness, tolerability and compliance on an ongoing basis. The burden of medicines should be reduced where possible, in line with Polypharmacy guidance. - Follow a clinically appropriate approach to initiation of analgesia, discussing expectations, risks and benefits and incorporating agreed criteria for stopping/continuing medication. <p>Review of medication must include an assessment of (Scottish Government, 2017b):</p>

	<p>Step 1: What matters to the patient.</p> <p>Step 2: Identify essential drug therapy.</p> <p>Step 3: Does the patient take unnecessary drug therapy?</p> <p>Step 4: Are therapeutic objectives being achieved?</p> <p>Step 5: Is drug therapy cost-effective?</p> <p>Step 6: Is drug therapy cost-effective?</p> <p>Step 7: Is the patient willing and able to take drug therapy as intended?</p>
Specifications:	<p>Key areas to be included in an audit:</p> <ul style="list-style-type: none"> - 90% of patients using analgesics to manage chronic pain receive an annual review. - 90% of patients using strong opioids and gabapentinoids receive an annual review of their medications. - 90% of patients on >180mg/day morphine or equivalent referred for specialist assessment/ advice. More recent guidance (Scottish Government, 2017b) suggests that opioids should not be prescribed at higher than 90mg morphine equivalent/day without specialist referral/ advice.
Target	<p>90% patients who are being prescribed medication to manage their pain should receive an annual medication review.</p>

QPI 4 – Service Evaluation and Audit (Levels 3 and 4)

QPI Title:	Service Evaluation and Audit (Levels 3 and 4)
Description:	Pain Services should be evaluated, at a minimum, on an annual basis. Pain Services should be evaluated to determine their effectiveness, use of resources and the extent to which they are fit for purpose.
Rationale and Evidence:	<p>Evaluation of the relevant outcomes in patients attending a Pain Service should be standard practice. This should include the “Core Minimum Dataset”. Patients attending Pain Management Programmes should demonstrate significant change in the specified domains of function, psychological well-being, healthcare use, quality of life and work status where relevant (The British Pain Society, 2013).</p> <p>The National Pain Audit Final Report 2010–2012 in England and Wales identified 7 key factors to be included in an audit (National Pain Audit Final Report 2010–2012):</p> <ul style="list-style-type: none"> - Type of clinic. - Staffing Standards. - Diagnosis and Treatment Coding Standards. - Waiting Times. - Multidisciplinary Care. - Change in Pain and Quality of Life Affected by Pain. - Numbers Receiving Advice and Guidance on Managing Pain. <p>The Faculty of Pain Medicine - Key Pain Management Standards for CQC inspection frameworks:</p> <ol style="list-style-type: none"> 1. A specialist pain management service will have at least two consultants who have achieved competencies and experience in advanced pain medicine, as defined by the Faculty of Pain Medicine of the Royal College of Anaesthetists, and undergo successful annual appraisal. Where two or more consultants are not available, then

	<p>cluster working with other regions Pain Services should be identified to ensure cover, peer networking, and support.</p> <ol style="list-style-type: none"> 2. No sole practitioner acting in isolation, whatever their profession, can claim to run a pain management clinic or service. 3. Specialist pain management services will involve nursing, physiotherapy, occupational therapy and clinical psychology staff. These specialists will have dedicated sessional time in the pain management service and attend multidisciplinary team (MDTs) meetings. 4. Specialist pain management services must have access to dedicated pharmacy input. 5. Input from other local specialists, e.g. psychiatry, palliative medicine, surgical and medical specialities, gynaecology, paediatrics, neurology and rehabilitation medicine must be available, as needed, to manage the patient case mix.
<p>Specifications:</p>	<p>Areas to be included in an audit:</p> <ul style="list-style-type: none"> - Type of clinic - Services as classified by self-assessment according to the IASP definitions: <ol style="list-style-type: none"> 1. Modality orientated clinic: clinic carrying out one treatment only. 2. Pain clinic: clinic carrying out more than one treatment but service has single profession. 3. Multidisciplinary pain clinic: service carrying out more than one treatment, with more than one type of healthcare professional. 4. Multidisciplinary pain centre: as per multidisciplinary pain clinic but also carrying out research. - Staffing Standards <ul style="list-style-type: none"> o Minimum staffing levels of a consultant pain specialist, psychologist and physiotherapist (National Pain Audit Final Report 2010–2012). If these standards are not met, cluster working with other regions Pain Services should be identified to ensure cover, peer networking, and support. o A specialist pain management service will have at least two consultants who have achieved competencies and experience in advanced pain medicine (The Faculty of Pain Medicine). If these standards are not met,

	<p>cluster working with other regions Pain Services should be identified to ensure cover, peer networking, and support.</p> <ul style="list-style-type: none"> ○ Specialist pain management services will involve nursing, physiotherapy, occupational therapy and clinical psychology staff. These specialists will have dedicated sessional time in the pain management service and attend multidisciplinary team (MDTs) meetings (The Faculty of Pain Medicine). ○ No sole practitioner acting in isolation, whatever their profession, can claim to run a pain management clinic or service. <ul style="list-style-type: none"> - Diagnosis and Treatment Coding Standards - Use the proposed ICD-11 classifications (Treede et al., 2015) in accordance with the “Core Minimum Dataset”. - Waiting Times (NHS Scotland, 2012): <ul style="list-style-type: none"> ○ 18 weeks Referral to Treatment Standard. - Multidisciplinary Care. <ul style="list-style-type: none"> ○ The minimum standard for multidisciplinary care as defined by the availability of medical, rehabilitation and psychological expertise (National Pain Audit Final Report 2010–2012). - Change in Pain and Quality of Life Affected by Pain - The proposed minimum core dataset includes questions on: <ul style="list-style-type: none"> ○ Pain Site(s). ○ Underlying Diagnosis. ○ Pain Duration. ○ Pain Severity. ○ Emotional Impact. ○ Functional Impact. ○ Health-Related Quality of Life. - Numbers Receiving Advice and Guidance on Managing Pain.
<p>Target</p>	<p>The following areas should be routinely recorded:</p> <ul style="list-style-type: none"> - Type of clinic. - Staffing Standards. Clinical discipline and WTE* - Diagnosis and Treatment Coding



	<ul style="list-style-type: none">- Waiting Times (average wait to first appointment; percentage waiting >12 weeks).- Multidisciplinary Team meetings.- Change in Pain and Quality of Life Affected by Pain.- Numbers Receiving Advice and Guidance on Managing Pain. <p>*Appropriate standards for these remain to be determined</p>
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QPI 5 – Exercise and Activity Therapies (Levels 1-4)

QPI Title:	Exercise and Activity Therapies (Levels 1-4)
Description:	<p>Patients should be provided with advice to increase and/or maintain their physical activity and/or improve their exercise uptake and signposted to a relevant service to improve adherence to exercise, where relevant. Information regarding the benefits of activity and exercise should be provided by the Pain Service. The following examples are recommended by Scottish Intercollegiate Guidelines Network (2013):</p> <ol style="list-style-type: none"> 1) Provision of educational material 2) Signposting to online resources (e.g. Couch to 5k) 3) Supervised exercise or activity sessions. 4) Individualised exercises in group settings. 5) Provision of a combined group and home exercise and activity programmes. 6) Referral to external provider (e.g. Live Well) <p>The patient should be provided with support to improve their adherence to the exercise regime.</p>
Rationale and Evidence:	<p>SIGN 136 recommends all forms of exercise and exercise therapy in the treatment of chronic pain patients (Scottish Intercollegiate Guidelines Network, 2013). It has been found that physical activity and exercise therapy is safe and beneficial in the treatment of chronic pain (Geneen et al., 2017), particularly those with chronic tension-type headaches and migraine (Daenen et al., 2015). However this needs to be appropriately managed and tailored to the individual with a particular emphasis on managing flare-ups and promoting recovery (Daenen et al., 2015). Advice to exercise alone, unaccompanied by support, is not sufficient (Scottish Intercollegiate Guidelines Network, 2013).</p>