

# Assessment and patient selection process for a pain management programme: a case study in specialty care

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#### **Abstract**

**Introduction:** The present study audited the process of assessing and selecting patients for a pain management programme with the aim of reviewing best practice in the light of the latest British Pain Society guidelines for pain management programmes for adults. The guidelines include defined inclusion/exclusion criteria and it was explored how they are used by clinicians providing a pain management service.

**Method:** The records of 200 consecutive patients who attended a multidisciplinary assessment for a central London specialist Pain Management Service from September 2014 to December 2014 were audited. The proportions of patients who were offered a programme, were discharged or referred for a different service were calculated. Clinic letters were reviewed to collect information on assessment outcomes, recommendations and inclusion/exclusion criteria used.

**Results:** About half the patients (53%) seen for assessment were offered treatment within the service, most frequently the intensive residential programme (30.5%, with an additional 11.6% offered case management first), followed by the five session outpatient programme (8.1%) and a minority was offered individual treatment (2.5%); 44.7% of the patients were discharged following the assessment. The three most frequently used reasons for exclusion were: not ready to engage with the pain management approach (35%), complex psychological or other needs needing to be prioritised (29.5%) and the patient declining a programme (19.3%).

**Conclusion:** Reviewing the use of inclusion/exclusion criteria revealed some challenges regarding patient selection. For example, a sizable proportion of patients were still seeking pain reduction and were not open to a self-management approach when this was the recommended treatment for them. Complex patients might need other treatment approaches before they can be considered for a programme. Having a range of pain management options of varying intensities available seems helpful in meeting individual patient need.

## Keywords

Pain management programmes, inclusion/exclusion criteria, attrition rates, patient selection, assessment

# Introduction

Pain management programmes (PMPs) for patients with ongoing intractable pain have traditionally been offered when no further medical interventions are suitable. The aim is to introduce self-management skills enabling participants to live successfully with chronic pain and to disengage them from being dependent on healthcare professionals or seeking further treatments which are unlikely to offer lasting benefits. There are

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commonly used inclusion and exclusion criteria for PMPs published by the British Pain Society in their Guidelines for PMPs. <sup>1,2</sup> In the latest version, <sup>1</sup> updated in 2013, they are summarised as follows:

#### Common inclusion criteria:

- Presence of persistent pain causing significant disability and/or distress.
- The participant is able to communicate in the language in which the PMP is conducted (a trained independent interpreter may facilitate successful participation).
- The participant is willing to participate in a group.

#### Common exclusion criteria:

- The participant has a limited life expectancy or rapidly deteriorating disease or condition.
- Uncontrolled psychosis and moderate-to-severe cognitive impairment are contraindications.

The guidelines mention that other criteria (such as poor motivation, ongoing litigation and poor written or spoken English) have been treated as obstacles in the past, but are likely to disadvantage certain patient groups and might exclude them from treatment with little evidence that they would not benefit when the issues are addressed adequately. The updated guidelines recommend a flexible use of pain management skills within care pathways, such as offering pain management components alongside treatments aimed at eliminating or reducing pain. Similarly, the original guidelines state that

Historically, patients have been referred to PMP only when many other treatments have failed. This is illogical. It is now recognised that this treatment should be offered when indicated by persistent pain causing distress, disability, and a negative impact on quality of life. (p. 13)<sup>2</sup>

Indeed, reviews show efficacy of combining pain management methods with disease management in osteoarthritis and rheumatoid arthritis.<sup>3,4</sup> A recent study reports that people considering further medical interventions (neuromodulation) appeared to benefit from a PMP based on psychological principles offered as part of the treatment pathway.<sup>5</sup>

Some patients self-exclude for various reasons. Looking at barriers to attending a self-management programme for patients with arthritis, Ackerman et al.<sup>6</sup> identified the following reasons why patients felt unable to participate: physical limitations, including illness, restricted mobility and pain (22%), difficulty getting to or from courses (22%), work commitments (22%), the time commitment required (17%) and family roles (12%).

In a previous study within our service, attrition rates were explored in the context of a change in the treatment pathway. Attrition rates were similar for the two different pathways and ranged from 47% to 57%. The main reasons for not proceeding to attend a PMP were seeking further medical treatment, not meeting the physical requirements for the programme (which is residential), self-exclusion (i.e. patients deciding against attending) and needing onward psychological referral as a priority. Addressing attendance issues is clearly an ongoing challenge for PMPs.

To date, there has been little research into how inclusion and exclusion criteria are used and applied to select patients for PMPs. Knowing more about who is likely to be excluded, for what reasons and what other recommendations are made could point towards ways of improving access and identifying the most suitable treatment pathways.

Of course, knowing who is most likely to benefit from a PMP could potentially inform the selection process. A recent systematic review exploring predictors and moderators of outcomes, specifically looking at contextual cognitive behavioural therapies for chronic pain, found that results were inconclusive and inconsistent.8 There were no predictors or moderators that were clearly supported across several different studies. The most consistent finding was that higher levels of emotional distress at baseline were associated with better treatment outcomes; yet even this pattern was not fully consistent and reversed in some of the reviewed studies. Demographic variables did not predict treatment outcomes and were largely non-significant. These inconsistent and at times contradictory results could be due to the heterogeneity of the studies included in the review and methodological variation as well as quality issues. The authors stress the need to study mediators (as well as moderators) using a theoretically driven approach to determine which treatment methods are most effective for different patient groups.8 With various different treatment modalities (residential, outpatient, individual, online) available, the challenge is to choose the most suitable option for any individual patient.

The present study reports on an audit of an assessment pathway where we tracked the outcomes of 200 consecutive patients from multidisciplinary assessment (determining suitability for a PMP). The aim was to explore which inclusion/exclusion criteria were used, reasons for discharge and to feed this information back to the clinical team. The results of the audit would serve as a basis for a review of the assessment process, identifying possible ways that access to the service could be improved and

Table 1. Demographic variables.

		n (%) or mean (SD)
Age	19–92	46.8 (13.0)
	19–29	15 (7.5)
	30–39	42 (21)
	40–49	68 (34)
	50-59	47 (23.5)
	60–69	15 (7.5)
	70–79	9 (4.5)
	80-89	3 (1.5)
	90–99	1 (0.5)
Gender	Male	60 (30.0)
	Female	140 (70.0)
Ethnicity	White	70 (61.4)
·	Mixed	3 (1.5)
	Black	24 (12.0)
	Asian	9 (4.5)
	Latin/Hispanic	1 (0.9)
	Other	7 (6.1)
Years of education		12.0 (5.4)
Pain duration (months)		134.1 (117.2)
Main pain	Lower back	75 (53.6)
	Generalised	40 (28.6)
	Lower limbs	9 (6.4)
	Abdomen	6 (4.3)
	Chest	3 (2.1)
	Neck region	3 (2.1)
	Head area	2 (1.4)
	Upper shoulder or limbs	2 (1.4)
	Missing	60 (30.0)

SD: standard deviation.

optimised to best meet the needs of patients referred to the department.

## Methods

Data were derived from consecutive patients attending a routine multidisciplinary assessment at a specialist pain management service in central London from September 2014 to December 2014. The assessment has two parts: one conducted by a psychologist and one conducted by a physiotherapist. The aim is to determine patients' suitability for a PMP and/or their need for other services. Both residential and outpatient programmes are offered and there is also the option of some short-term individual psychological or physiotherapy pain management support. Patients who may be suitable for a programme but need to make some preparations first in order to allow them to engage with the treatment can be referred for 'case management'. Such changes may include changes to analgesic medication or to their daily routine. The study was registered as an audit on the Trust audit database (audit no 5236).

# **Participants**

200 chronic pain patients (70.0% women) referred by a general practitioner or pain consultant to a speciality pain service in central London were included in the study. The majority of participants defined their ethnicity as white (61.4%) and participants ranged in age from 19 to 92 years old (mean 46.8 years, standard deviation (SD) = 13.0). The mean number of years of education was 12.0 (SD = 5.4); 53.6% of participants reported their lower back as the main site of pain. The mean pain duration was 134.0 months (SD = 117.2; range: 6–504 months) (see Table 1 for demographic details).

Patients referred to tertiary pain centres typically report high levels of pain-related distress and disability. Although data on pain-related distress and disability were not collected in the present study, another study using a different sample from our centre did so.<sup>9</sup> In this study, 60.8% of participants attending for assessment met criteria for probable major depressive disorder (with 55.6% of these reporting a severe level of

**Table 2.** Comparison of demographic differences between the group of patients who were offered treatment and the group who were not offered treatment with no statistically significant differences found.

		Mean (SE)	Chi-square test	t(df)
Age				0.816 (98)
-	Offered treatment	48.2 (2.3)		
	Not offered treatment	45.9 (1.8)		
Ethnicity			$X^{2}(1) = 1.766$	
Gender			$X^{2}(1) = 0.322$	

SE: standard error.

Table 3. Assessment outcomes.

	n (%)
Intensive PMP	60 (30.5)
Outpatient PMP	16 (8.1)
Case Management – Medication	16 (8.1)
Case Management – Occupational Therapy	5 (2.5)
Case Management – Both	2 (1.0)
Individual psychology (internal)	5 (2.5)
Internal consultant	4 (2.0)
Change to neuromodulation pathway	1 (0.5)
Discharge	88 (44.7)

PMP: pain management programme.

symptoms), 52.8% reported being unable to work because of health reasons. The mean Brief Pain Inventory – Interference Scale<sup>10</sup> score was 8.0, indicating that pain significantly interfered with functioning in this sample.<sup>9</sup>

#### Data collection

For each patient, the outcome of the assessment (based on clinic letters) was recorded using the following six categories:

- 1. Intensive residential PMP;
- 2. Outpatient programme;
- 3. Case management (to provide support in order to work up to attending a programme);
- 4. Individual input within the service (psychology or physiotherapy);
- 5. Referral to pain consultant;
- 6. Discharge:
  - Does not meet minimum physical criteria
  - Psychological complexities or other needs that would impact on engagement in PMP/be better addressed in another service
  - Not ready to engage with a pain management approach (focus on pain reduction and treatment/further interventions planned)
  - Pain is not significantly impacting on functioning
  - · Addiction or substance use

- Language/capacity to participate in English
- Other..... (Please state).

The inclusion/exclusion criteria for the residential PMP have previously been published in this journal in the context of another study<sup>11</sup> and the categories used in the reasons for discharge section reflect these.

# Data analysis

The frequency of each assessment outcome was calculated. The reasons for discharge were analysed in more detail using information documented in clinic letters. Comparisons were made between the group of patients who were offered treatment and the group who were not offered treatment using chi-square or t-tests as appropriate.

# Results

There was no significant difference in age between those who were offered treatment (M=48.2, standard error (SE)=2.3) and those who were not offered treatment (M=45.9, SE=1.8), t(98)=.816, p=.417. There was no significant association between a person's gender and whether or not they were offered some form of treatment  $X^2(1)=.322$ , p=.570. There was no significant association between a person's ethnicity and whether or not they were offered some form of treatment  $X^2(1)=1.766$ , y=1.84. Please see Table 2 for a summary.

53.2% of patients assessed were offered treatment within the pain management service (Table 3). 38.6% of patients attending assessment were booked straight on to a treatment programme (residential or outpatient) and the others were offered case management or individual work (see Table 3). The proportion of patients discharged at assessment was 44.7%. The most frequent three reasons for discharge were: not being ready to engage with a pain management approach (35%), complex psychological or other needs needing to be addressed first (29.5%) and patient declining (19.3%) (see Table 4).

**Table 4.** Reasons for discharge (according to the exclusion categories used in the audit).

Reasons for discharge	na (%)
Not ready to engage with pain management approach	31 (35)
Of these	
Seeking pain reduction	18 (20.5)
Further pain intervention planned	13 (14.8)
Complex psychological or other needs needing to be prioritised	26 (29.5)
Pain not significantly impacting on functioning	14 (15.9)
Does not meet minimum physical criteria	13 (14.8)
Addiction/substance misuse	1 (1.1)
Language	1 (1.1)
Other <sup>b</sup>	29 (33)
Of these	
Patient declined (in six cases due to family or work commitments)	17 (19.3)
Further consultation with pain consultant needed	5 (5.7)
Miscellaneous	4 (4.5%)
Treatment for other health conditions to be prioritised	3 (3.4%)

<sup>&</sup>lt;sup>a</sup>More than one option applied in several of the 88 cases so percentages total more than 100%.

# Discussion

About half the patients who attended the multidisciplinary assessment for a PMP were directly offered some form of treatment, most frequently the residential PMP (30.5%) followed by the outpatient programme (8.1%). 11.6% were offered case management (medication review and/or occupational therapy intervention) with the objective of preparing to attend the residential programme in the near future. A small number were offered brief individual treatment. The audit showed that clinicians made use of the different treatment options and having a range of services of different intensity seems to allow for greater flexibility to respond to patients' needs. The outpatient programme was introduced more recently, in 2013, and the figures here confirm that a proportion of patients referred to the department were assessed as more suitable for this and did not seem to need a high intensity residential programme. The outpatient programme is appropriate for participants who are likely to benefit from a brief intervention. It is designed for people who report a less severe impact of pain on their everyday functioning. They might still be in work or have other ongoing commitments (such as childcare). For patients who do not meet the minimum physical criteria for the residential programme, the outpatient programme is not likely to provide enough time and professional input, so is not a viable alternative. For example, it does not include occupational therapy or medication reduction, frequently needed in more complex cases. We can recommend a hospital-based high intensity programme elsewhere for patients who would not be able to manage the independent and self-caring aspects of our residential programme.

Almost 45% of patients were not directly offered treatment within the service following the assessment, which may appear to be a high number. We searched the available literature and were unable to find published data from other service audits to compare our results with. Most patients are referred with a view of attending the residential programme, and this requires participants to be self-caring and able to stay away from home independently, so this requirement does lead to some patients being sent elsewhere for care. We note that alternative recommendations were frequently made for patients who were not offered immediate access to treatment within our centre, often with the understanding that they could be referred back on completion of other treatments or consultations. In addition, as we are a national service, we get referrals for patients living some distance away, which might make it less feasible for them to attend, and again require that we arrange alternative treatment elsewhere.

The main reasons for exclusion are outlined below. A number of groups emerged and were studied in more detail with the aim of determining what could be done to meet the needs of these patients better.

# Patients who are still seeking medical treatment and pain reduction

A sizable group of patients were not offered a PMP because they were still seeking treatment, investigations or pain reduction. Looking at these cases more carefully, it was found that some of them had further

<sup>&</sup>lt;sup>b</sup>Due to the high frequency in this category, it was broken down further.

treatments planned, but over half of this group had been referred because a self-management approach was seen as the best option by their referring doctor and no other medical procedures or investigation were seen as appropriate. Yet, they were not offered a PMP because they were deemed not sufficiently open to a self-management approach. To be clear, in line with the British Pain Society (BPS) guidelines, having an intervention planned was not in and of itself an exclusion criterion. Rather, when this was coupled with not being open to a pain management approach, it became a reason for exclusion.

There is a question as to how these patients could be better served. An extended assessment or individual follow-up appointments are possible, allowing patients more time to explore a self-management approach and working towards willingness to engage. At times, introducing pain management skills alongside interventions can be useful, as outlined in the updated BPS guidelines. Although engaging patients in a self-management approach may be challenging if they are still seeking medical solutions, there is some evidence that offering a PMP as part of the neuromodulation pathway to prepare patients for the procedure is beneficial and can help improve patients' emotional and physical functioning.<sup>5</sup>

# Patients with overriding complex needs that need to be prioritised

Patients who were assessed as presenting with complex co-morbidities (often psychological in nature, such as severe post-traumatic stress disorder and severe depression) that would impede their capacity to participate in a PMP formed another sizable group. Attending a residential programme with nonstaffed accommodation requires participants to be psychologically stable enough to manage independently away from home. An exploration of the detailed clinic letters for these complex patients revealed that in the vast majority of cases, a clear care plan was put in place at assessment. For example, a referral to a local mental health service or to social services was recommended, frequently with the option of a review for a PMP once psychological therapy was completed. In some cases, psychiatric care was in place already. In many cases, the assessors offered to provide consultancy about pain management principles to local mental health teams. The option of seeing patients for a short number of individual sessions within the pain management service is often not suitable for patients with complex mental health needs and risk issues, who need more intensive psychological support or who are already involved with other service providers.

# Highly functioning patients who do not report a significant impact of pain on their lives

Some patients were not offered a PMP because they did not seem to need the intensity of a residential or outpatient course. They were functioning relatively well. However, it seems reasonable to consider developing treatment options for this patient group to prevent deterioration and support their self- management, such as online or app-based pain management courses that patients can access flexibly in their own time from home. This is particularly suitable for people who are working or have other commitments that would make it difficult for them to participate in a conventional PMP. Evidence is accumulating that online and app-based formats can be effective. 12-15

19.3% of patients declined the offer of a programme and in some cases this was due to family and work commitments. Having the option of an online pain management course might have been a suitable alternative for some of these patients.

# Patients who do not meet the minimum physical criteria for attendance

For some patients, the assessment revealed that they were not able to function independently enough to attend a programme. To address this, an occupational therapy-led case management service can be offered in our service for patients with more complex needs. Case management aims to help patients prepare for a programme to increase the likelihood for fully engaging and completing the course. It typically addresses issues like daytime sleeping, anxiety regarding being away from home and over-reliance on others that would make it challenging for them to manage independently while on the programme. Clinical nurse specialists are involved in case management when patients need to address medication use, such as unsafe use of liquid morphine. These options increase flexibility within the service to respond to complex needs. However, in some cases, even case management is not likely to be sufficient to get patients to a place where they can reach the level of functioning required for a programme. Other support might be needed, such as help through social services.

# Language barriers

Few patients were excluded because of language barriers. However, this might be because such patients were not referred in the first place, as most referrers are aware that attending a PMP requires at least basic competency in the English language (although some services do offer programmes in other languages or

with interpreters). In this service, individual sessions are available should the patient wish to engage in a pain management approach, but is not able to speak English sufficiently to manage in a group.

# Age – are older adults underrepresented?

While there is no upper age limit and attendance is open to all adults, the demographic breakdown of the sample seems to reveal that older adults are possibly underrepresented. This is noteworthy, as age-related conditions can also be associated with pain. There is evidence that older adults benefit from PMPs<sup>16–18</sup> and improving access for this group should be addressed. There was no significant difference in age between those who were offered treatment and those who were not offered treatment in the present study, which indicates that the bias might occur at the referral stage.

# Service implications and feedback

The outcomes of the audit were shared with the multidisciplinary team (including referring consultants). The need to establish better links with referrers and provide clear information on exclusion/inclusion criteria was highlighted. How the service could better meet the needs of patients currently excluded was discussed – some of the ideas are outlined above.

We hope that similar audits on the use of inclusion/ exclusion criteria will be conducted and published in other services. Sharing best practice and learning from audit data can lead to proactive improvement of clinical services and guidelines, resulting in changes that are likely to benefit patients directly.

# Limitations of the study

As the study was conducted as an audit and a case study rather than a research trial, it has obvious limitations and merely presents a 'snap-shot' of clinical practice in one service. How the findings would translate and generalise to other services is not known and it would be interesting to have similar audit data from other pain management services in other contexts. How access to PMPs can be improved and optimised is an area that needs further research. It would be particularly interesting to look into patients with ongoing pain who are not referred for PMPs and exploring the reasons for that.

#### Conclusion

In the service examined here, patients were most frequently excluded from attending a PMP for the following reasons: lack of openness to a self-management

approach, other complex issues needing to be addressed first, patient declining, failure to meet the minimum physical criteria and, for some, lack of need for treatment due to high functioning and pain not having a significant impact. The audit pointed towards some actions that could help to make the service more accessible, such as offering extended assessments for patients who might need more time to consider a self-management approach. Making a range of options available (residential, outpatient, individual, online) makes it more likely that patients can access a service best suited to their needs and also creates efficiencies and cost savings, since the intensity of the treatment is more precisely matched to patient need. Complex patients might need other treatment approaches before they can be considered for a programme. Their care plans may include being reviewed again at a later stage, once other therapies have been completed. Liaising with other services might facilitate engagement with a plan that includes more than one step. The assessment can serve to put necessary care in place.

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# **Conflict of interest**

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

## Ethical approval

Ethical approval is not needed because the study was a service audit and not a research trial. However, the study was approved by the audit lead of the service and registered on the Trust audit database.

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## Trial registration

The study was registered as an audit on the GSTT Trust audit database (audit no. 5236).

#### Guarantor

LK.

# Contributorship

LDK, BJG and AD-E conceived the study and researched relevant literature. All authors were involved in protocol

development and L.M.M. gave advice on the study design. LDK, BJG and AD-E gathered the data and AD-E conducted the data analysis. LDK wrote the first draft of the manuscript. All authors reviewed and edited the manuscript and approved the final version of the manuscript.

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#### References

- 1. The British Pain Society. Guidelines for pain management programmes for adults. Report, The British Pain Society, London, November 2013.
- The British Pain Society. Recommended guidelines for pain management programmes for adults. A consensus statement prepared on behalf of the British Pain Society. Report, The British Pain Society, London, 2007.
- 3. Dixon KE, Keefe FJ, Scipio CD, et al. Psychological interventions for arthritis pain management in adults: a meta-analysis. *Health Psychol* 2007; 26(3): 241–250.
- 4. Knittle K, Maes S and De Gucht V. Psychological interventions for rheumatoid arthritis: examining the role of self-regulation with a systematic review and meta-analysis of randomized controlled trials. *Arthritis Care Res* 2010; 62(10): 1460–1472.
- 5. McCracken LM, Davies M, Scott W, et al. Can a psychologically based treatment help people to live with chronic pain when they are seeking a procedure to reduce it? *Pain Med* 2015; 16(3): 451–459.
- Ackerman IN, Buchbinder R and Osborne RH. Factors limiting participation in arthritis self-management programmes: an exploration of barriers and patient preferences within a randomized controlled trial. *Rheumatology* 2013; 52(3): 472–479.
- 7. Knight L, Jamani N and Cowburn A. Impact of a new care pathway on attendance on a residential chronic pain management programme (PMP). *J Pain Manag* 2010; 3(2): 131–139.
- 8. Gilpin HR, Keyes A, Stahl DR, et al. Predictors of treatment outcome in contextual cognitive and behavioral

- therapies for chronic pain: a systematic review. J Pain 2017; 18(10): 1153–1164.
- 9. Rayner L, Hotopf M, Petkova H, et al. Depression in patients with chronic pain attending a specialised pain treatment centre: prevalence and impact on health care costs. *Pain* 2016; 157(7): 1472–1479.
- 10. Daut RL, Cleeland CS and Flanery RC. Development of the Wisconsin Brief Pain Questionnaire to assess pain in cancer and other diseases. *Pain* 1983; 17(2): 197–210.
- 11. Smith JG, Knight L, Stewart A, et al. Clinical effectiveness of a residential pain management programme comparing a large recent sample with previously published outcome data. *Br J Pain* 2016; 10(1): 46–58.
- 12. Nevedal DC, Wang C, Oberleitner L, et al. Effects of an individually tailored Web-based chronic pain management program on pain severity, psychological health, and functioning. *7 Med Internet Res* 2013; 15(9): e201.
- 13. Bender JL, Radhakrishnan A, Diorio C, et al. Can pain be managed through the Internet? A systematic review of randomized controlled trials. *Pain* 2011; 152(8): 1740–1750.
- 14. Eccleston C, Fisher E, Craig L, et al. Psychological therapies (Internet-delivered) for the management of chronic pain in adults. *Cochrane Database Syst Rev* 2014; 2: CD010152.
- 15. Macea DD, Gajos K, Daglia Calil YA, et al. The efficacy of Web-based cognitive behavioral interventions for chronic pain: a systematic review and meta-analysis. *J Pain* 2010; 11(10): 917–929.
- McCracken LM and Jones R. Treatment for chronic pain for adults in the seventh and eighth decades of life: a preliminary study of acceptance and commitment therapy (ACT). *Pain Med* 2012; 13(7): 861–867.
- Nicholas MK, Asghari A, Blyth FM, et al. Self-management intervention for chronic pain in older adults: a randomised controlled trial. *Pain* 2013; 154(6): 824–835.
- 18. Scott W, Daly A, Yu L, et al. Treatment of chronic pain for adults 65 and over: analyses of outcomes and changes in psychological flexibility following interdisciplinary acceptance and commitment therapy (ACT). *Pain Med* 2017; 18(2): 252–264.