

SPECIAL ARTICLE

Initial assessment and management of pain: a pathway for care developed by the British Pain Society

C. Price^{1*}, J. Lee^{2,3}, A. M. Taylor⁴ and A. P. Baranowski⁵

¹ Pain Medicine, Pain Clinic, University Hospital of Southampton Foundation Trust, Tremona Road, Room OC9, Southampton, Hampshire SO16 6YD, UK

² Pain Medicine, Cayman Islands Hospital, PO Box 915, Grand Cayman KY1-1103, Cayman Islands

³ University College London, London, UK

⁴ Anaesthesia, Intensive Care and Pain Medicine, Cardiff University, Heath Park Site, Cardiff CF14 4XN, UK

⁵ Pain Medicine, Pain Management Centre, National Hospital for Neurology and Neurosurgery, Queen Square, London WC1N 3BG, UK

* Corresponding author. E-mail: c.m.price@soton.ac.uk

Editor's key points

- There is lack of a consistent approach to managing pain.
- This pathway, developed by the British Pain Society, focuses on the beginning of a patient's journey.
- Early identification of high-risk patients will allow better resource allocation and patient outcome.

Summary. There is wide variation in how pain is managed in the UK. Patients often find themselves caught in a sea of referrals while continuing to suffer with poorly relieved symptoms. The British Pain Society's (BPS) Initial Assessment and Management of Pain care pathway (one of the five new BPS care pathways published by the Map of Medicine[®]) sets out how best to initially manage persistent pain. Patient education and supported self-management is recommended from an early stage. This pathway focuses on the start of the journey of a patient with pain, where a full diagnostic work-up is not yet complete. The pathway covers diverse recommendations such as appropriate content of a pain consultation, the use of clinical decision management tools to aid stratification of care, and resources to support patients to make informed decisions. Recommendations for monitoring of therapeutic effect are also included. Early identification of people at high risk of chronic disability may allow more intensive management, better use of resources, and reduction in disability. Implementation poses significant challenges; more research is needed to determine the most effective interventions. This article highlights practice points for the non-specialist, discusses areas of controversy, and examines the challenges of implementation.

Keywords: chronic pain; pain; pain measurement

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Pain is a universal experience. However, pain that is very severe or that continues longer than expected causes significant distress. At a summit in Montreal in 2011, through expert advice and consensus, the International Association for the Study of Pain re-affirmed the following based on the International Covenant on Economic, Social and Cultural Rights (1966):¹

- for all people to have access to pain management without discrimination;
- for people in pain to have their pain acknowledged;
- for people in pain to be informed about how pain can be assessed and managed;
- for people with pain to have access to appropriate assessment and treatment of the pain by adequately trained healthcare professionals.

Appropriate management includes good assessment and an agreed management plan that includes access to pain medications, best practice interdisciplinary and other integrative non-pharmacological therapies. The services must be delivered by professionals skilled in the safe and effective use of

the medicines and treatments; these services should be supported by health policies, legal frameworks, and procedures to assure fair access and prevent inappropriate use. These powerful sentiments were encapsulated in the Declaration of Montreal (2011)¹ and are the starting point for this care pathway.

The impact of any pain that persists is profound. Recently, a large English health survey estimated that 14 million people have long-term pain, with 67% of these reporting anxiety or depression.² Epidemiological research in Scotland found that severe chronic pain is associated with an increased risk of mortality although the exact nature of the association is unclear.³ Chronic pain has deleterious effects on employment prospects and access to housing, and results in high healthcare usage.^{4,5} The health service costs of treating pain are also high. In 2010, England spent on average £8.80 per head of population on analgesics, with the figure in the North being as much as £15 per person.⁶ In view of this significant impact, strategies are needed at a governmental level to address the burden of pain. A recent survey by the International Association for the

Study of Pain found that seven countries had developed such strategies.⁷ Part of any strategy to effect change in practices will involve clinical guidelines that reduce variation in health-care provision and produce greater consensus among professionals.⁸ Guidelines for pain are generally considered to reduce disability by ensuring that patients are more likely to receive proactive care.^{9–10} Recognizing the complexities in management of pain and the myriad of healthcare professionals involved, the report of the chief medical officer of England, 'Pain: breaking through the barrier', specifically recommended model pathways to guide practitioners in the management of pain.⁵

In response to this recommendation, an executive committee of the British Pain Society (BPS) commissioned five pathways of care in 2012: the Initial Assessment and Management of Pain (presented here); Chronic Widespread Pain, Including Fibromyalgia;¹¹ Low Back and Radicular Pain;¹² Pelvic Pain;¹³ and Neuropathic Pain.¹⁴ They can be viewed on the BPS website (<http://bps.mapofmedicine.com>) and via Map of Medicine (www.mapofmedicine.com).

Aims and objectives of the pathway

The Initial Assessment and Management of Pain pathway aims to:

- guide the practitioner in the initial management of any type of pain;
- support recognition of those with complex pain and at risk of disability;
- recommend appropriate monitoring arrangements.

The pathway provides extensive information and advice both to patients and practitioners on the broad principles of pain management. It draws upon a considerable body of evidence on identification and management of those at high risk of chronic disability. The pathway also aims to take the non-specialist, regardless of setting, through a series of steps to ensure that pain is well managed alongside any ongoing investigations or treatments and, importantly, when pain appears to persist for no apparent reason. Unlike the other pathways in this series, it can be applied to any type of pain and in any circumstance. This article describes practice points of note in the pathway, discusses areas of controversy, and examines the challenges in adoption of this pathway with recommendations as to how these may be overcome.

An overview of Initial Assessment and Management of Pain care pathway is shown in Figures 1 and 2.

Support to self-manage pain is important and relevant from the outset

Effective self-management to promote active coping strategies is an established therapeutic goal for chronic pain.^{15–16} The use of passive coping strategies has been found to be associated with higher disability rates.¹⁷ Whether or not the pain actually disappears or fades over time or with treatment, the principles of self-management, explanations as to how pain can persist, social support, educating oneself and others, and

self-care are all needed. Bair and colleagues¹⁸ found that significant barriers to self-care in pain are many and include lack of family support, financial barriers, and fear of exacerbations through increased activity. Difficult patient–physician interactions were also highlighted as a factor.

Proactive self-management support is recommended with written information and access to peer support or professional help; this is often available from voluntary or charitable groups. While it might be intuitive that support to self-manage makes a difference, evidence for this in the form of high-quality randomized trials is limited.^{19–20}

Structured education for patients

The pathway recommends that commissioners should ensure structured education with appropriate resources in place. Information that patients require is diverse. It is unclear how much patients benefit from structured education, but by extrapolating from diabetes care, cancer pain, treatment for alcohol dependency, and learning from the Expert Patient Programme experience, it is clear that a proportion will benefit. However, those at a higher risk of more severe impact of pain on their lives are likely to require a more significant investment—individualized care plans are often advocated in this circumstance.^{21–22}

Terminology, including the term 'chronic'

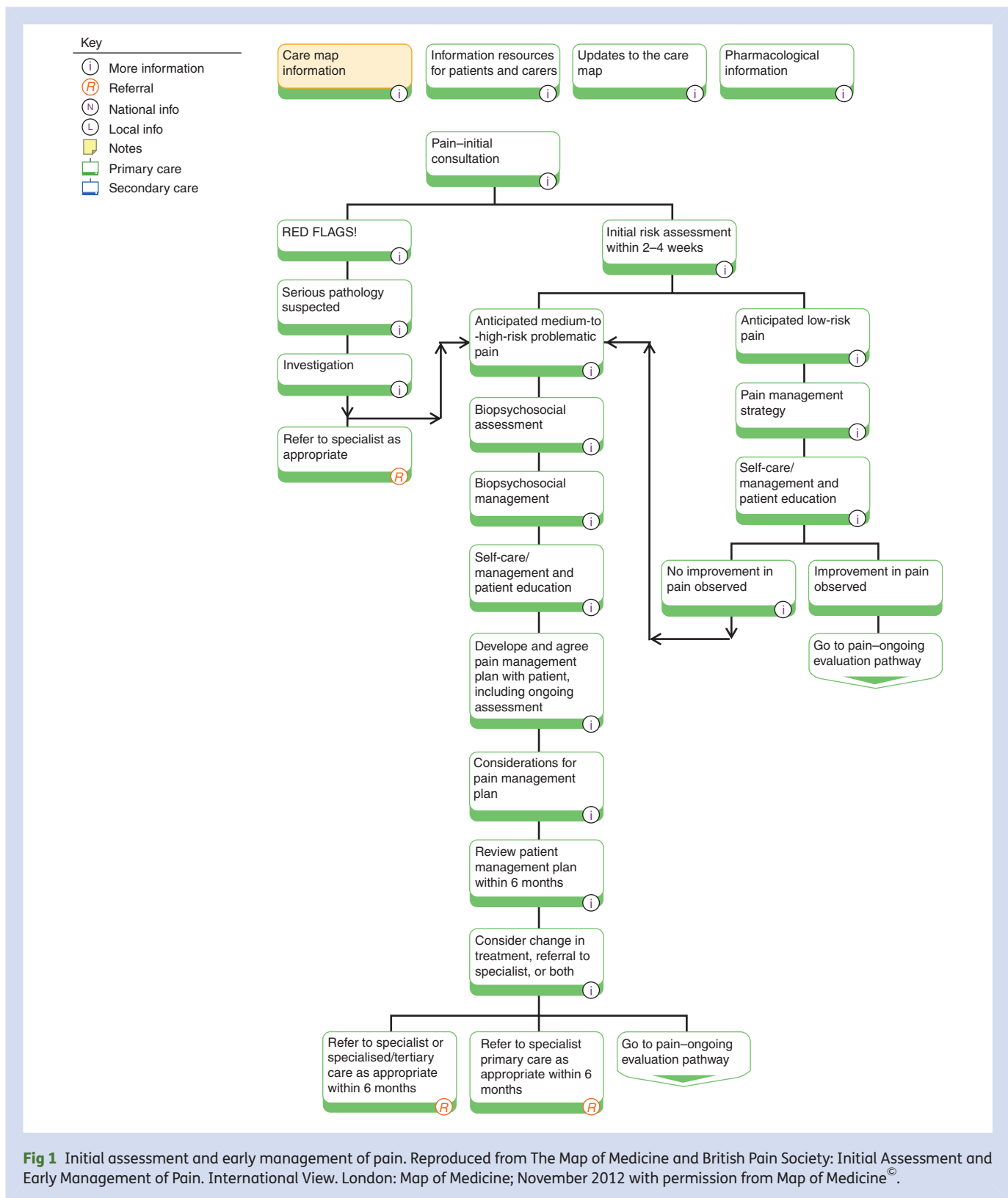
There are a myriad of definitions pertaining to acute and chronic pain. These cause confusion in terms of both clinical management and service delivery. Pain of a short duration has less impact on the individual, and thus a single practitioner could be expected to reasonably manage most episodes. Severe enduring pain may require a whole team to support the patient. A popular alternative definition of chronic pain is 'pain that extends beyond the expected period of healing'.²³ The term 'chronic' has been identified as suggestive of depression and futility,²⁴ so the pathway group felt that it was better to use the term 'persistent'. The pathway group also felt that the term 'chronic pain patient' may lead to a failure to assess and reassess the causes of pain; on the other hand, the term 'persistent' recognizes that there is a pain condition but this does not lessen the clinical imperative to reach an appropriate diagnosis.

Identification of psychosocial factors that may increase pain and associated disability are also critical; these will prolong pain problems. If these are present, then the pain is described in the pathway as 'problematic'. However, at a recent consensus meeting the decision was made to term this group 'complex' and a commitment made to develop a research programme centred on this.

The guidance will need to be updated to reflect the emerging consensus on terminology. Coding practices are also likely to require a review to ensure that the terminology is consistent.

Assessment of pain and risk stratification to identify those at risk of persistence

A purely biomedical perspective is unlikely to get to the bottom of why pain persists in many people. The pathway highlights

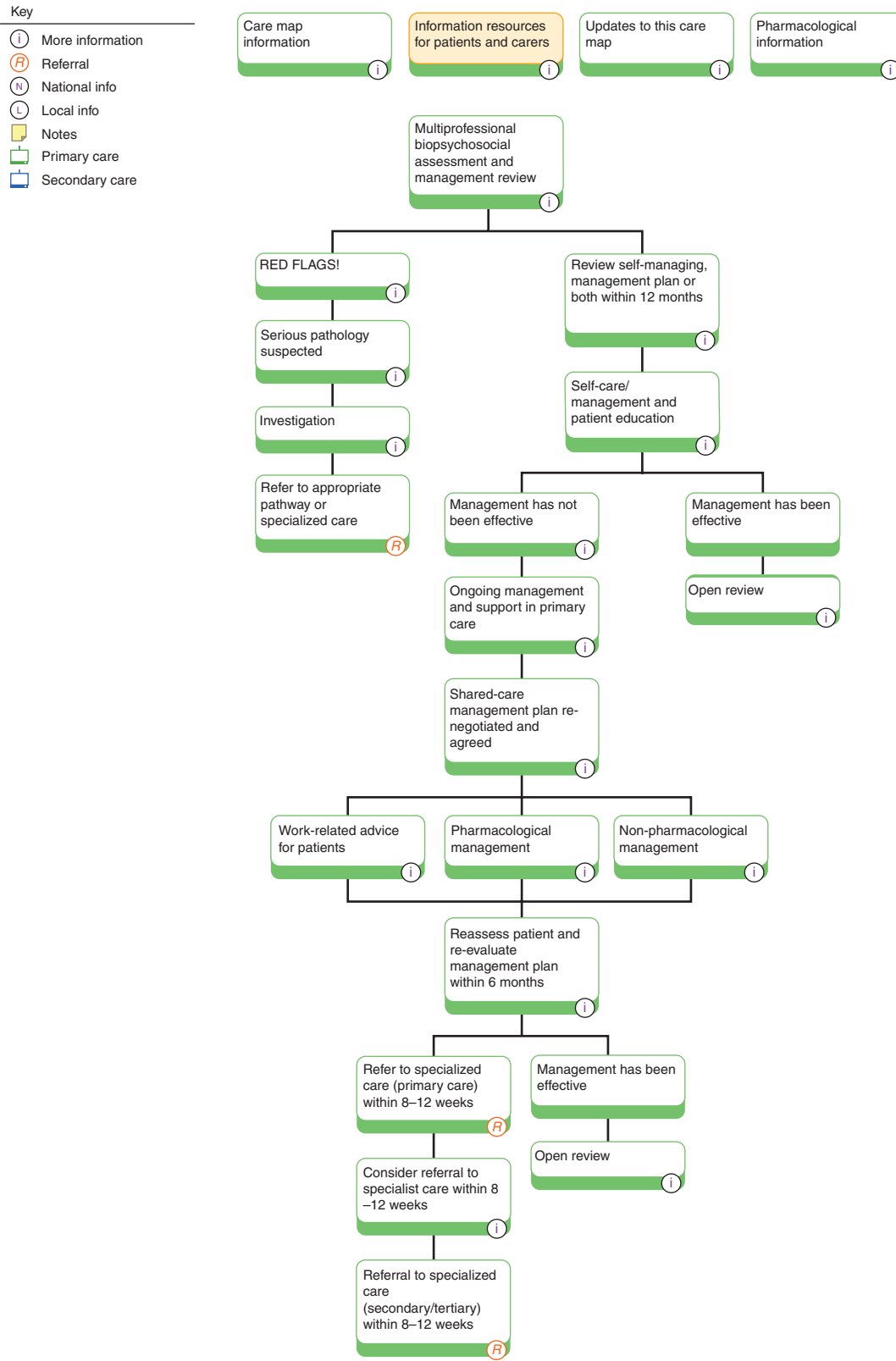


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Fig 1 Initial assessment and early management of pain. Reproduced from The Map of Medicine and British Pain Society: Initial Assessment and Early Management of Pain. International View. London: Map of Medicine; November 2012 with permission from Map of Medicine ©.

that an assessment may be difficult because pain can be complex with entwined physical and psychosocial factors. At a pathological level, systemic diseases may be masked by changes in pain, development of new problems, and psychological issues. Getting the balance right is essential for a

successful outcome. Research has highlighted that patients may not present with pain but with its consequences such as: employment issues; a threat to benefits; deteriorating mental health; or medication or treatment failure, or both.²⁵ This can make assessment extremely challenging.



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Fig 2 Pain: ongoing evaluation: initial assessment and early management of pain. Reproduced from The Map of Medicine and British Pain Society: Initial Assessment and Early Management of Pain. International View. London: Map of Medicine; November 2012 with permission from Map of Medicine®.

The pathway group recommends simple tests and nothing more in the initial assessment and management of pain. For example, X-rays to exclude trauma and erythrocyte sedimentation rate for suspected inflammatory disease are regarded as sufficient initial investigations. This list is not exhaustive, and the important point is to move away from the continuous cycle of investigations and encourage non-specialists to utilize a bio-psychosocial assessment for management. The pathway contains a list of recommendations on how to identify those at risk of chronic disability and suggests psychosocial interventions that may reduce disability. While there has been extensive research into this for chronic back pain, the situation is less clear for other types of pain. Nevertheless, the pathway draws upon the research into persistent low-back pain, making use of the 'yellow flags' approach.²⁶ The STarTBack tool for low-back pain is a short questionnaire that stratifies people into high, medium, and low risk of chronic disability. High-risk patients are offered a cognitive behavioural therapy (CBT)-based intervention with physical therapy, whereas the low-risk respondents are initially just given advice; it is a good example of how a risk assessment coupled with matched treatments may provide timely and cost-effective care.²⁷ The effect size in terms of cost-effectiveness was small in the STarTBack trials and, while it represents a promising start, significantly more research is needed to refine the approach to a point where it can be widely implemented across conditions and settings. The Faculty of Pain Medicine of the Royal College of Anaesthetists has been tasked with supporting the research process through its newly formed Clinical Research Network for Pain.

Bio-psychosocial assessment

In primary care, the bio-psychosocial assessment forms part of a 'patient-centred' consultation to deal with undifferentiated problems and psychosocial issues. Other interventions include ensuring a strong therapeutic alliance and shared decision-making. While this is the bedrock of a consultation in primary care, the relationship between the specific format of a patient-centred consultation and the outcome is unclear and further work is needed on this.²⁸ When moderate-to-severe pain instinctively drives a practitioner to look for its sources, there is a risk that psychosocial factors get overlooked and remain unaddressed. Equally, there can be too much focus on psychosocial factors if they are readily identified, and the medical factors then get overlooked. A collaborative care model, which includes a two-session clinician education programme, patient assessment, education and activation, symptom monitoring, feedback and recommendations to clinicians, and facilitation of specialty care, has been shown to have promise in patients with musculoskeletal chronic pain.²⁹ Such models are being pursued with some success in the USA across a broad number of common conditions and allow greater flexibility of approach compared with services working in isolation. Research is urgently needed into the nature and style of a pain-related consultation that can best deliver successful outcomes earlier in the patient journey.

Active patient involvement in decision-making

Active patient involvement in care requires a strong relationship and an information exchange in line with patient values and preferences. This can be formalized into a process known as shared decision making (SDM). SDM has been defined as 'an approach where clinicians and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options, to achieve informed preferences'.³⁰ To ensure that decision-making is truly shared may require not only simple patient information sheets but also interventions that encourage patients to consider key issues and evaluate relevant options. An example of such interventions is the patient decision aid, which breaks down decision-making into sequential steps while at the same time tries to elicit patient values and preferences.³¹ The pathway allows visual representation of those steps and potential options. These complex interventions have recently been developed to suit a range of decision-making styles in areas relevant to Pain Medicine. SDM has been found to improve patient satisfaction. However, SDM's impact on clinical outcomes and unwarranted variation is less clear.³² Further evaluation of SDM is necessary to achieve more widespread implementation, but has the potential to significantly improve the outcomes of care for people in pain when faced with decisions about treatment.

Monitoring pain relief

A useful mnemonic contained within the pathway is the concept of the four A's for effective treatment monitoring:

- Analgesia (pain relief).
- Activities of daily living (psychosocial functioning).
- Adverse effects (side-effects).
- Aberrant drug taking (addiction-related outcomes).³³

The rising tide of opioid-related deaths and development of addiction in the USA have highlighted the need to monitor pain-relief prescriptions more closely.^{34 35} Initial investigations in the UK suggest that prescriptions have increased sharply. As a result, the BPS recommends a minimum of six-monthly monitoring for strong opioids.³⁶ Such monitoring should only apply to stable patients; more frequent monitoring is needed when establishing a pain-management plan. Moore and colleagues³⁷ suggest that one should expect analgesic failure, as the evidence would suggest that patient response is very individualistic, and only small cohorts will respond to each analgesic: the challenges in establishing a stable plan are therefore considerable.

Trials of analgesia accompanied by close monitoring are recommended, with the imperative to stop if there is no or little response. The four A's approach provides a useful method to achieve this with timing matched to need. The awareness of the likelihood of analgesia failure needs to be raised with the general population and, rather than just discarding analgesia, persistence needs to be encouraged. Imaginative solutions will be needed to deliver this recommendation, perhaps making

better use of pharmacists, although a recent small randomized controlled trial had mixed results.³⁸

Management of the high-risk patient

The pathway group recommends additional interventions for those identified at high risk of chronicity. Enquiry into patient beliefs and expectations are fundamental to this. Beliefs about pain often need some adjustment in the high-risk patient. While metaphors can be useful in explaining pain,³⁹ it is important to avoid terms that are recognized as causing concern.⁴⁰ Recent UK recommendations are to use an advocate or carer to help convey messages to those with communication or cognitive difficulties, and ensure that the patients receive full and up-to-date information about pain-management services alongside the evidence base for treatment in a suitable format for them to understand.^{41 42}

Significant support from patient and other organizations will be needed to explain the rationale for this and thus enable implementation of this recommendation. The pathway group also recommends a review within 6 months for those at high risk of disability once a management plan has been agreed. In addition, a specialist assessment should be achieved within 8–12 weeks if there is no sign of improvement. If pain impacts significantly on work, the time frame should be shortened in line with guidance such as that produced by the UK National Institute of Clinical Excellence on prevention and management of long-term sickness and incapacity.⁴³

Education of healthcare professionals in pain management

The overall aim of this pathway is to educate the non-specialist, provide information to the patient, and support decision-making. There are significant barriers to implementation that will need to be overcome. Basic pain assessment and management is taught at an undergraduate level to most healthcare professionals. However, the time spent on this is short and many argue it is too brief to be meaningful. A BPS survey of 19 higher education institutions delivering 108 undergraduate programmes found that pain education accounted for <1% of programmed hours of teaching for some disciplines. Veterinary students received the greatest number of hours of teaching. The survey concluded that ‘pain education is woefully inadequate given the prevalence and burden of pain’.⁴⁴ The impact of this is that those at risk of the most severe disruption to their lives may go unrecognized and inadequately managed until it is too late to be effective. In response to this, the Faculty of Pain Medicine and the BPS have sponsored the development of multiple e-learning modules through the e-learning for health programme ‘e-pain’ (<http://www.e-lfh.org.uk/projects/pain-management/>).

Conclusion

One of the aspirations of the first English Pain Summit was to enable pain to ‘become a high street disease’ and reduce the time to diagnosis and management of chronic pain to a few

months.⁴⁵ Through local adoption of this pathway, the management of complex pain problems in their early stages and general pain management should be clearer and more accessible and go some way to meeting this aspiration. Successful adoption of the pathway by a local community would require:

- training of non-specialist staff through inclusion in the relevant curricula;
- development of easy to use templates that allow a professional to follow the pathway;
- research on risk assessment, management of the high-risk patient and optimal prescribing algorithms;
- raising awareness of the approach that a non-specialist will take in the management of pain. The ‘Sheffield Aches and Pain’ website for back pain is a useful example of this;⁴⁶
- the further development and refinement of SDM aids relevant to pain management.

Adoption of the pathway represents a significant challenge, and will require the support of policy makers and clinical leadership. While educational initiatives and research are an important start, the translation of knowledge into necessary skills and actions remain a challenge. A commitment to quality-improvement programmes in pain could achieve this. This could be achieved through a system of financial incentives based on clinical quality indicators (in the UK, relevant current programmes include the Quality Outcomes Framework, local Quality Premiums, Essence of Care benchmark, and NICE quality standards). This should place the emphasis on integrated care with proper registration, recall, and review systems put in place. Without such a structured approach, the current models of delivery are unlikely to support improved management of pain. Map of Medicine is widely available; however, a range of publications in a variety of formats are needed to raise awareness in the non-specialist community. Patient and professional organizations need to champion this pathway with non-specialists. The potential to enhance the quality-of-life for many suffering people should not be underestimated.

Authors’ contributions

C.P.: first draft, subsequent edits, collaboration with external party (Map of Medicine) final submission. J.L.: second draft, development of presentation, subsequent edits. A.M.T. overall lead on pathway design and content, referencing, review and draft edits. A.P.B.: editing, collaboration with external party (Map of Medicine).

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Executive Committee: Andrew Baranowski (Chair), Martin Johnson, Richard Langford, Cathy Price; British Pain Society. The Pathway Map working group members who created this map were Chris Barker, Sonja Bigg, Val Conway, Jo Cummings, Neal Edwards, Owen Hughes, Martin Johnson, Roger Knaggs, Douglas Smallwood, and Ann Taylor (chair).

Declaration of interest

All authors contributed to the design and writing of this paper, without any financial or other assistance. C.P. is or has been: a clinical director at Southampton City Clinical Commissioning Group; a consultant advisor to the National Institute of Health Research; external examiner for Masters in Pain Management on evidence-based practice, Cardiff University; executive member of Chronic Pain Policy Coalition and National Pain Audit Lead, British Pain Society. She was an advisor on the National Pain Strategy for Australia 2010–11 and to the International Association for the Study of Pain in a similar capacity. In the past, she has received payment for an advisory role to Janssen 2004 on fentanyl patches in chronic non-malignant pain and to Grunenthal on a pain education programme 2009, and has received funding from the European Federation of IASP Chapters to attend a consensus meeting on quality indicators for pain management in Europe 2013. A.M.T. is or has been: a reader, Cardiff University, Cardiff (Chair); board member of Chronic Pain Policy Coalition; Committee member of Primary Care Special Interest Group, BPS; member of Educational SIG, BPS, and the RCGP Pain Champion steering group. She has lectured and received honoraria from Grunenthal and Lilly. Her Cardiff University role is sponsored by Napp Pharmaceuticals. She is on advisory boards for Flynn, Astellas, Grunenthal and Napp. J.L. is treasurer, for SPIN (pain teaching and research registered charity). A.P.B. is employed by the UCLH NHS Foundation Trust; is Clinical Lead Pain Management Centre, UCLH; is the Chairman of The Taxonomy Committee, Pain of Urogenital Origin (PUGO), Special Interest Group of IASP; is a Committee member, Pelvic Pain Guidelines Committee, The European Association for Urology (EAU covers expenses); is Honorary Treasurer, British Pain Society; Chairman NHSCB, Clinical Reference Group Specialised Pain Services, England; Consultant for Mundipharma Research GmbH & Co; is an Invited Speaker for multiple organizations from time to time, for which expenses are paid; and has published multiple chapters and publications. Partnership—Baranowski and Hearn, private practice.

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