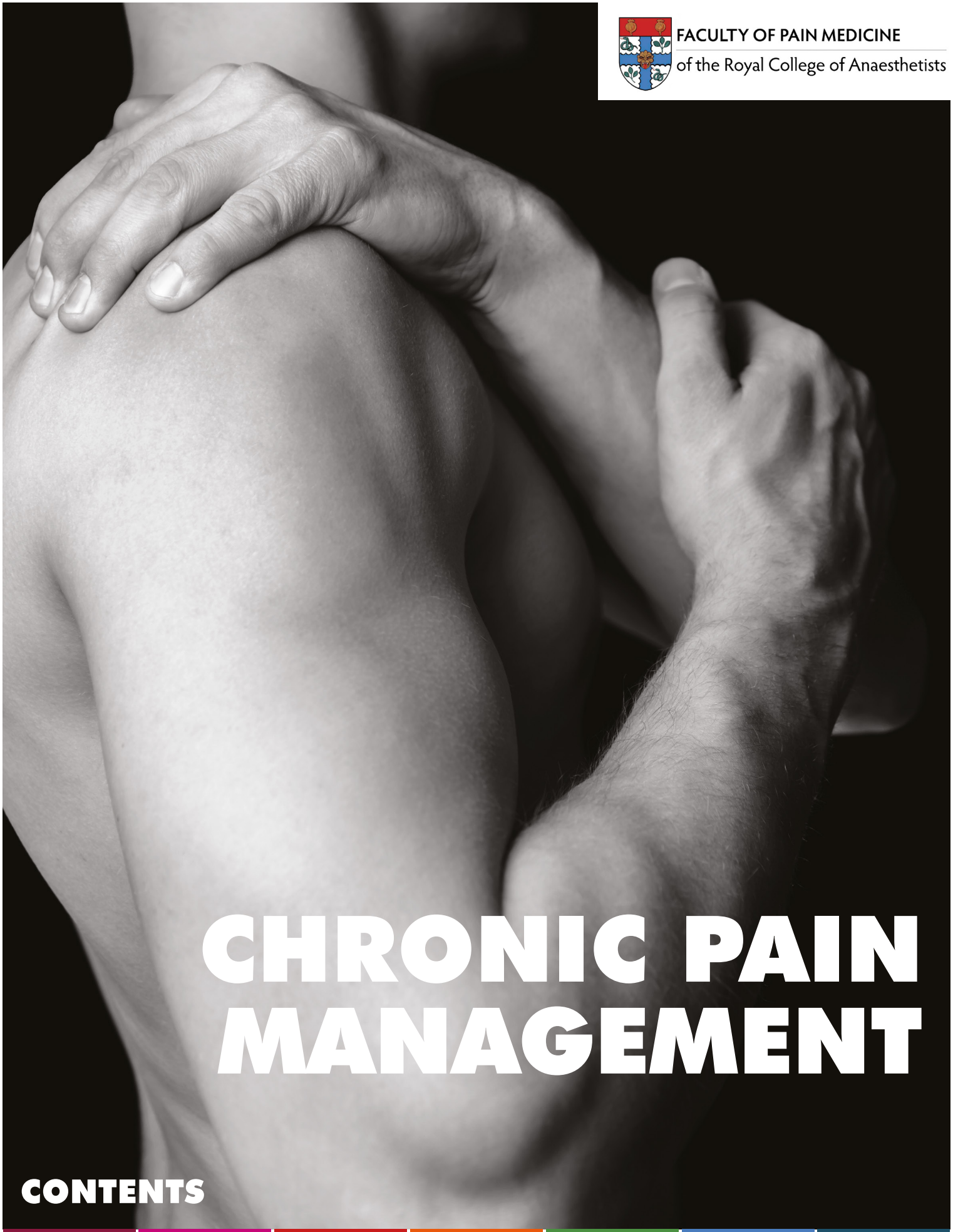


FACULTY OF PAIN MEDICINE
of the Royal College of Anaesthetists

CHRONIC PAIN MANAGEMENT

CONTENTS

INTRODUCTION

THE CHALLENGES AND KEY CONCEPTS

CHRONIC PAIN

Chronic pain is a pain that persists for more than 3 months after an injury or illness. It is estimated that approximately one in five of Europe's adult population suffers from chronic pain.

Breivik H, Collett B, Ventafridda V, et al. Survey of chronic pain in Europe: prevalence, impact on daily life, and treatment. Eur J Pain 2006; 10: 287–33

Acute or short-lived pain that follows injury or occurs during illness is a warning sign of potential or actual damage to the body. It triggers a natural response in terms of behaviour and communication to minimise the harm, protect the body, promote healing and seek help. It can be all consuming preventing an individual focusing on anything else. There is a received wisdom that such pain will be finite, has a cure and that rest and inactivity will promote recovery. Chronic pain is generally not a warning sign of harm but understandably individuals react in a very similar way and persist with the same conceptions around potential cure and immobility as facilitator of recovery. However as chronic pain is sustained and largely irreversible this pattern of behaviour can be distressing and frustrating and have devastating psychological and socioeconomic impact on the individual and those close to them. In some cases it can lead to significant disability and dependency.

CHRONIC PAIN MANAGEMENT

Chronic pain management is not about achieving complete pain resolution. Instead it is about improving a client's function and well being by reducing pain and managing the impact of the pain on their life. There are some key principles to improving outcome:

- An understanding that chronic pain is genuine and a medical condition in its own right irrespective of the trigger. Validation and empathy are vital for building trust and cooperation
- A shift from an acute to chronic pain model of understanding cause, management and prognosis
- Focusing on the impact of the pain as oppose to its magnitude and character will offer more achievable and tangible goals for the client and the therapist
- Chronic pain can be caused by a wide variety of medical conditions and so it is important to ensure treatable causes which could reduce the pain have been thoroughly considered
- Negative psychology as a consequence of chronic pain and also as an exacerbating factor should always be considered
- A multimodal approach should be used to manage chronic pain with the client's ownership of their pain and self-efficacy at the centre surrounded by elements, which will help them to manage their pain and its impact on their life, including physiotherapy, talking therapies, medications and intervention from secondary care

INTRODUCTION

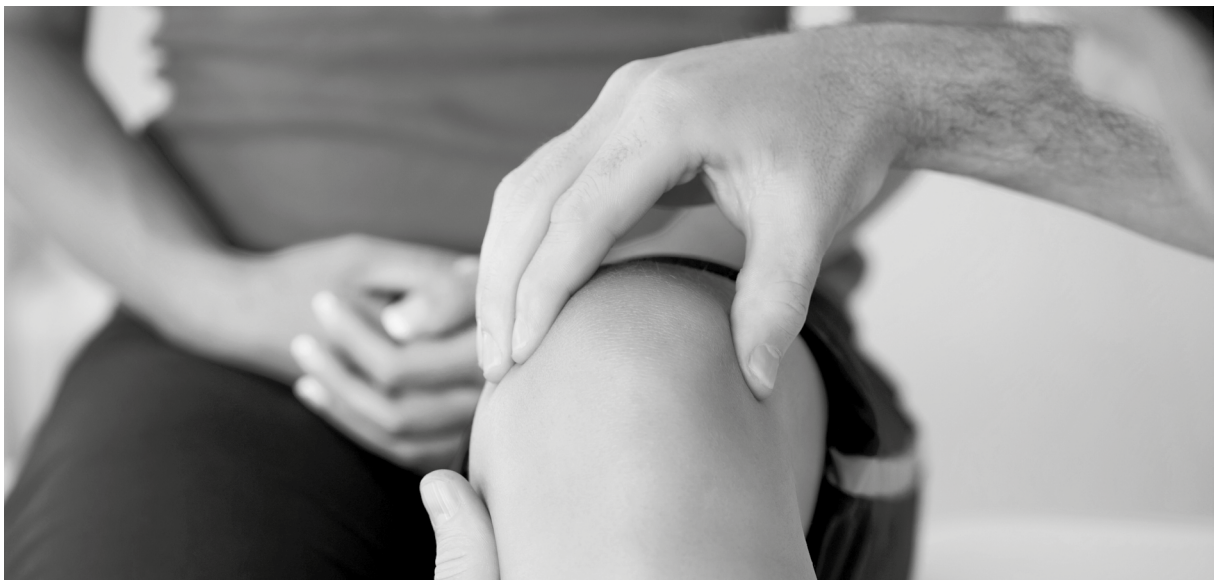
OUTLINE OF THE MANUAL

- The initial task will be to assess the client's pain and this has four components:
  1. Assessment of impact (Section 1a.) and the client's coping mechanisms (Section 1b.) forming the foundation for goal setting and management strategies
  2. Consideration of potential causes (Section 1c.)
  3. Information gathering around past treatment and current management strategies (Section 1d.)
  4. Screening for significant medical and mental health conditions and current medications which could contribute to the client's pain or affect management (Section 1e.)
- Quite often the client will have experienced scepticism regarding the existence and extent of their pain and so in order to build trust and cooperation it is important to validate their perception of pain (Section 2)
- The therapist can then work with the client to reduce the negative pain behaviours which are increasing the impact of the pain rather than promoting recovery. Initially by introducing the concept of acute verses chronic pain and then relating their stereotypical response to pain back to its affects on their life (Section 2)
- Having developed the full picture with the client of the factors contributing to their pain, the impact their pain has had on their life and established the challenges chronic pain will present in the long-term the therapist can then outline therapies (Section 3) that will assist the client to achieve SMART goals (Section 5)
- A clear explanation of the therapies available including mechanisms of action, expectation around efficacy and potential side effects and risk of harm will allow the client to make informed choices about their pain management (Section 3). It may be necessary to get the assessment and input of various outside professionals (Physiotherapist, Psychologist, Pain Medicine Consultant) if access is not immediately available or the pain management is not improving
- Some medications may be more appropriate for use in a secure environment presenting less risk of abuse or drug-related death (Section 3)
- Strong opioids have only a limited role in the management of chronic pain and may increase pain levels with long-term use. To address this in individuals on strong opioids who may be dependent is challenging. It requires the therapist to present evidence of poor efficacy, increasing tolerance, potential long-term harm and constructive alternatives, in combination with a sympathetic weaning strategy (Section 4)
- The magnitude of pain and its change in response to therapy is difficult to quantify and arguably of limited value for an individual. Assessing impact, goal setting and appraising the extent to which impact is negated and goals are achieved offers a more tangible indication of progress for the client and therapist (Section 5)
- The overall goal is a client with self-efficacy who utilises various pain management strategies to reduce and adapt to living with chronic pain and who can seek appropriate help should problems arise (Section 6).

SECTION 1: ASSESSING PAIN

AN EMPATHETIC AND COMPREHENSIVE FOUNDATION ON WHICH TO DEVELOP A CLIENT CENTRED AND SAFE PAIN MANAGEMENT PLAN

CONTENTS OF THIS SECTION



1A. ASSESSING THE IMPACT OF PAIN ON THE CLIENT AND THOSE AROUND THEM

Asking the client to appraise the impact of the pain on their life and the lives of those close to them has 3 roles:

1. It provides a baseline from which goals can be set

2. It offers empathy for the consequences of the pain

3. It avoids an immediate focus on reducing the magnitude of pain, its unpleasant character and the search for a potential cause. These elements often come to define clients with chronic pain. How a therapist addresses them is used by the client to benchmark the success of all consultations and therapy

SECTION 1: ASSESSING PAIN

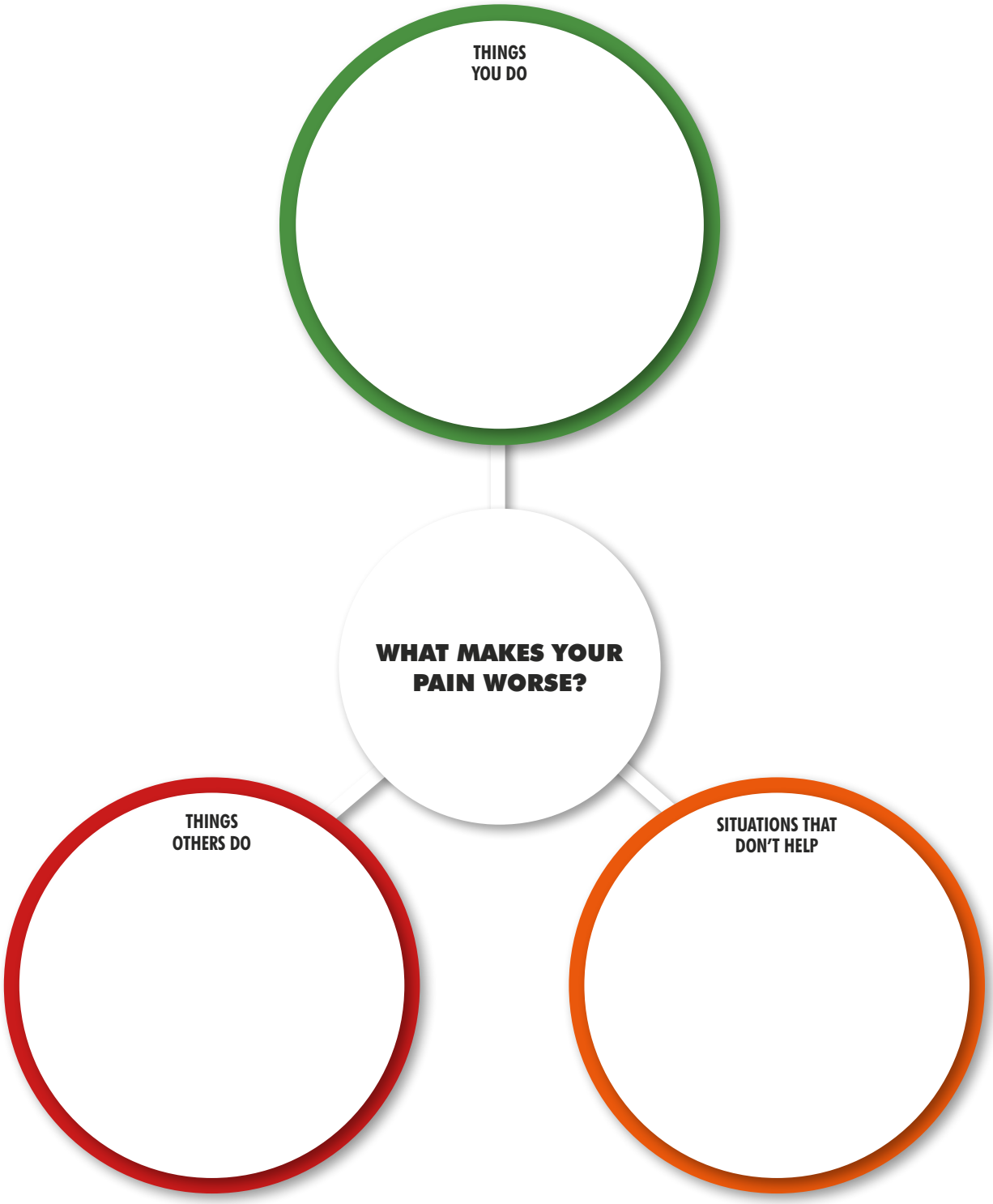
"How do you feel your pain affects you and those you are close to?"

Addressing exacerbating factors will allow the client to consider avoiding these when developing their management plan:

WHAT MAKES YOUR PAIN WORSE?

SECTION 1: ASSESSING PAIN

SECTION 1: ASSESSING PAIN



SECTION 1: ASSESSING PAIN

1B. HIGHLIGHTING STRENGTHS AND SUPPORT AVAILABLE

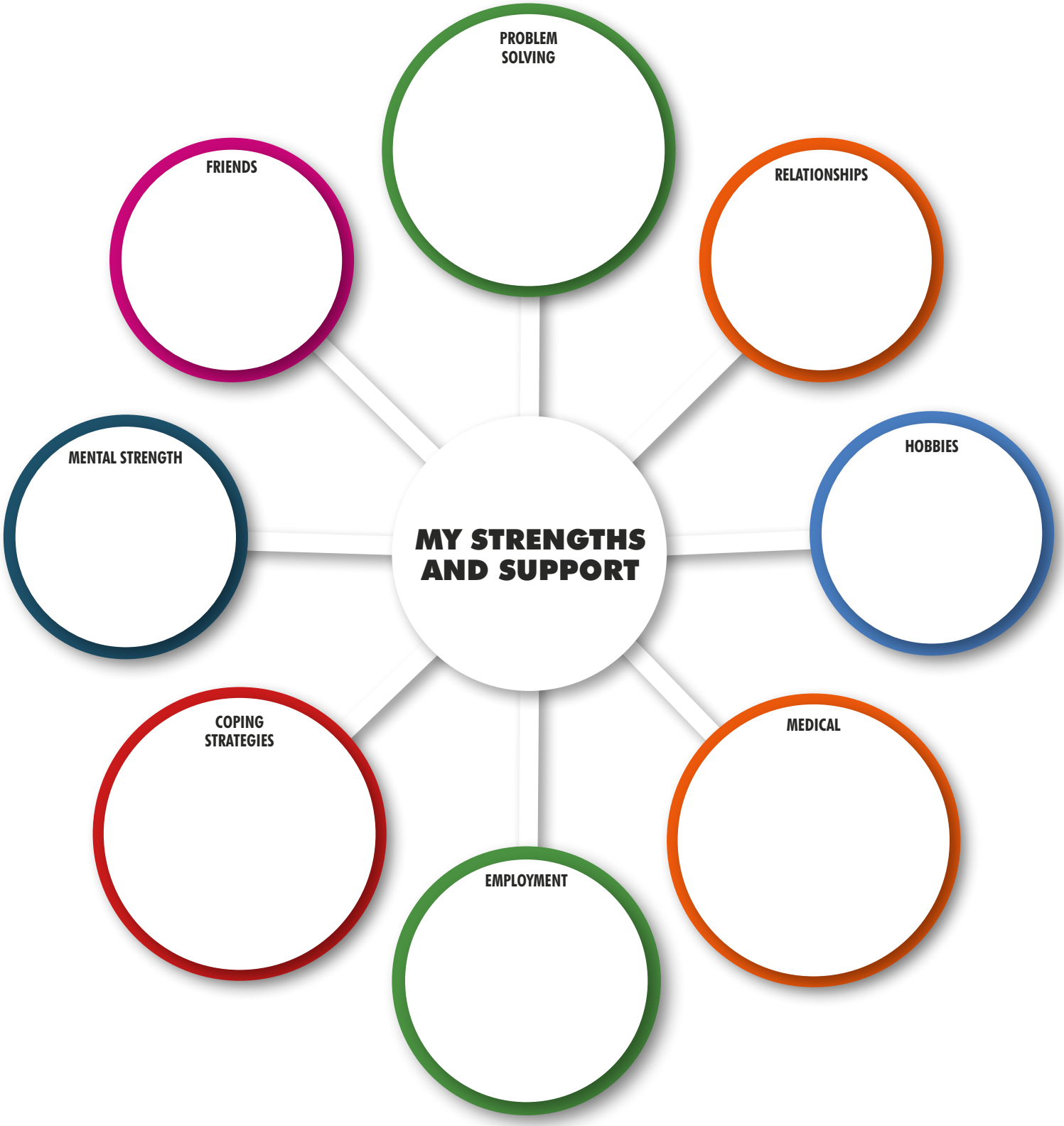
Having established the negative impact it is important for motivation to highlight positive skills and resources the client can build on to tackle their pain.

"In spite of the pain you are in how have you managed so far?

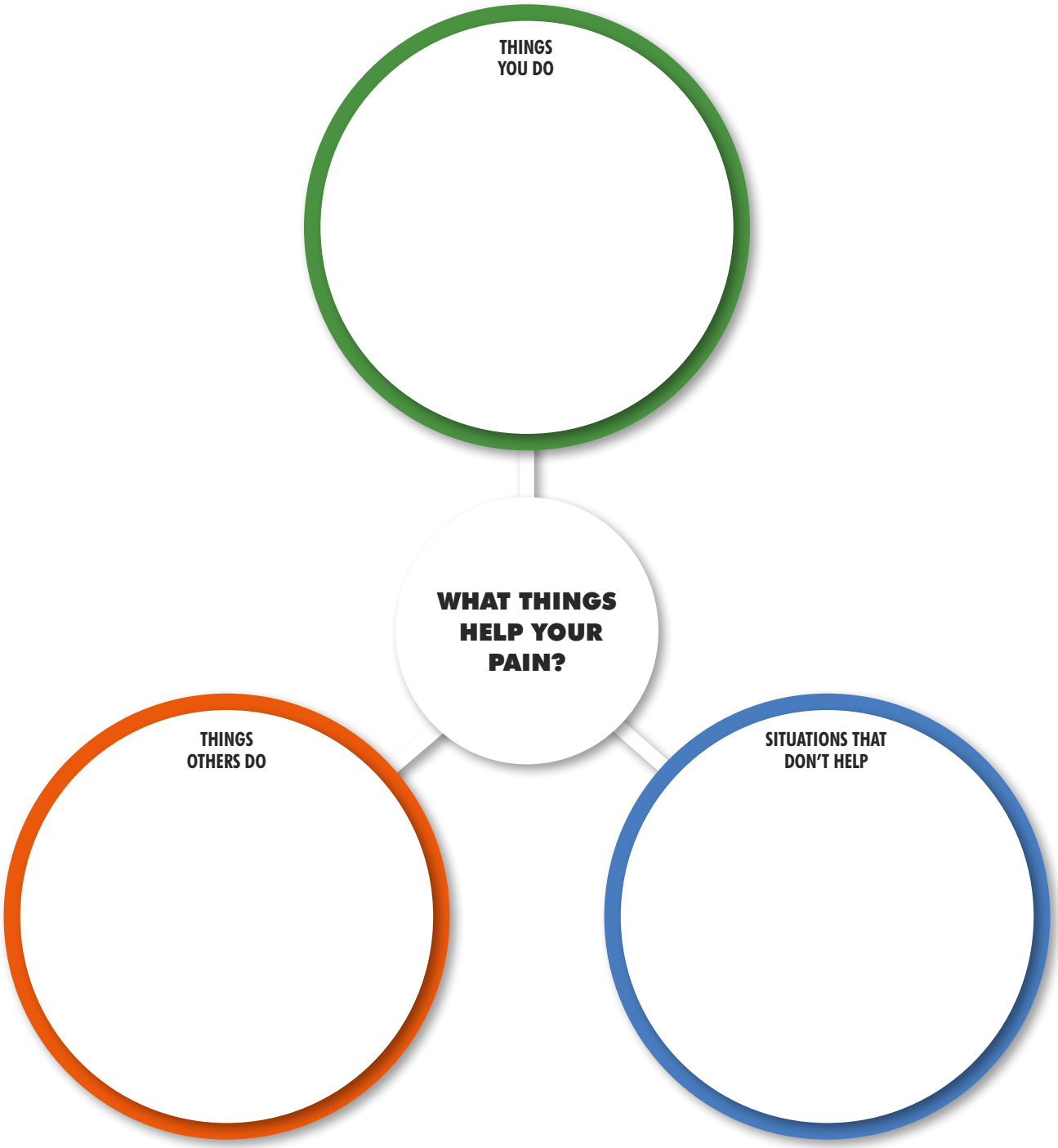
What are your strengths and what support can you draw on?"

Considering potential relieving factors will allow the client to maximise these when developing their management plan:

SECTION 1: ASSESSING PAIN



SECTION 1: ASSESSING PAIN



1C. POTENTIAL CAUSES OF CHRONIC PAIN

Understanding the cause of a client's chronic pain will be invaluable in devising a management plan and assessing the need for further investigation and specialist input.

Pain is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.

Pain is a largely subjective experience and objective markers such an increased heart rate, increased blood pressure, hyperventilating and sweating are only features associated with acute rather than chronic pain.

In the community an assessment of pain is made on the assumption that reporting of factitious symptoms and drug-seeking behaviour are rare. Within a secure environment the probability of this is higher, with a client potentially aiming to secure analgesia for personal use or as currency. To counter this there are a few key features to consider before settling on a diagnosis and commencing any medication:

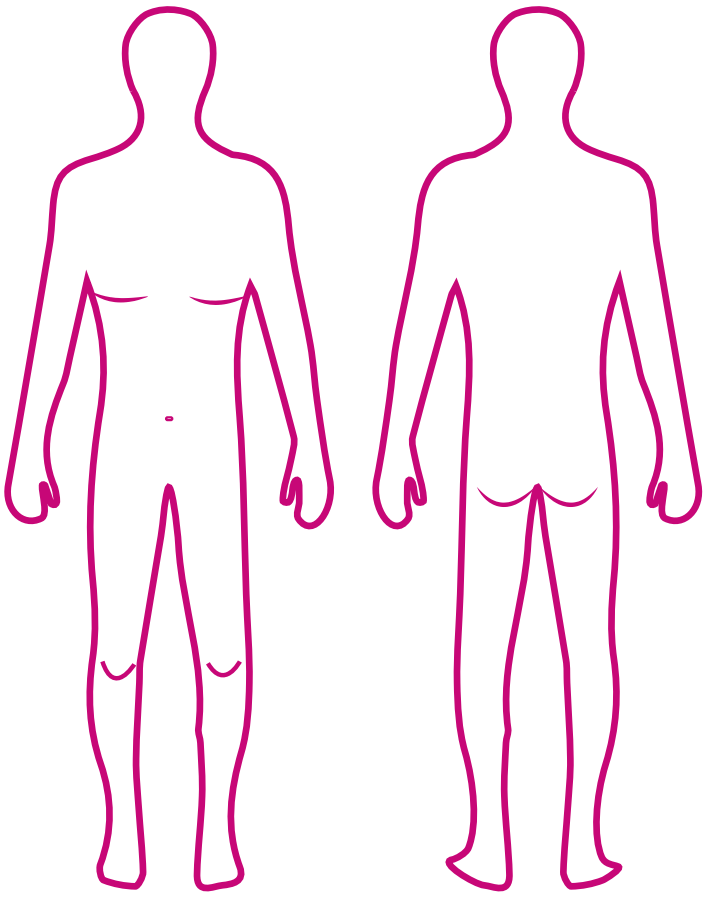
- Is there objective evidence of an underlying disease or injury that could potentially cause pain? Does the location and character of the pain fit with the potential underlying cause? Corroborating documentation and investigations from primary and secondary care including the opinions of specialists will be helpful.
- Is there already on going treatment of an established chronic pain condition? Contact the client's community primary care team to clarify the diagnosis and treatment.
- Is there a history of substance abuse including alcohol, which would predispose to further problems?

SECTION 1: ASSESSING PAIN

A BRIEF PAIN ASSESSMENT AND DIAGNOSIS

Where is your pain? **Mark where your pain is strongest by shading the area on the picture. If your pain spreads to another area of your body indicate this by circling that area and drawing an arrow to show which way the pain is going.**

- **When did your pain start?**
- **What do you think triggered the pain?**
- **Are you ever pain free and how long does this last?**
- **What words would you use to describe your pain?**
- **Are there any unusual sensations associated with your pain?**
- **Is the painful area extremely sensitive to touch?**



SECTION 1: ASSESSING PAIN

Chronic pain can be broadly divided into nerve pain (Neuropathic pain) and non-nerve pain (Nociceptive pain). Nerve pain arises as a result of damage to nerves anywhere from the brain and spinal cord to the skin. Non-nerve pain is essentially the result of damage and on going inflammation of all other tissues.

Having determined whether the pain is the result of nerve injury, non-nerve injury or a combination of the two, the therapist should then consider what attempts have been made to determine the potential cause by consulting with the client's community primary care team. If the diagnosis is not reinforced by adequate investigation it will be necessary to seek specialist advice to clarify the diagnosis, consider potentially treatable causes and gain formal advice before considering commencing medication (Section 3).

NEUROPATHIC PAIN

The client may use words like burning, shooting and electric shock-like to describe the pain. As well as causing pain, injury to the nerve can also affect its function leading to abnormal sensations (numbness, pins and needles and painful sensitivity).

The likelihood of a pain being neuropathic can be assessed using the Leeds Assessment of Neuropathic Symptoms and Signs LANSS scale.

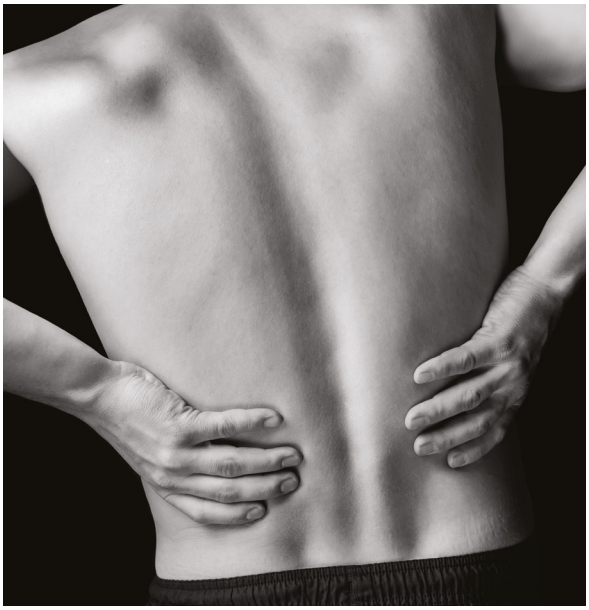
Bennett M, The LANSS Pain Scale: The Leeds assessment of neuropathic symptoms and sign. Pain 2001;92: 147- 157

There are a number of conditions that are associated with neuropathic pain and add weight to this as a potential cause of the client's pain:

- Shingles
- Phantom limb pain
- Stroke
- Vertebral disc prolapse with confirmed nerve irritation on MRI scan
- Trauma or surgery where probability of nerve injury has been documented in medical notes, confirmed by nerve conduction studies or confirmed on MRI scan
- Diabetes with diagnosed nerve injury (peripheral neuropathy)

NOCICEPTIVE PAIN

The client may use words like aching, stabbing and throbbing. It is usually confined to a particular area. However it can spread (referred pain) usually to immediately adjacent areas. For example a lower back pain may spread to the buttocks and thighs, a hip pain may spread to the knees and neck pain can spread to the shoulders and head. In chronic pain this type of pain is often the result of progressive degeneration such as arthritis.



1D. PAST AND PRESENT PAIN MANAGEMENT

Gathering information about the client's experience of pain management in terms of medications and other therapies will allow refinement of future plans so as to include de novo interventions, replicate successes and avoid repetition of interventions that were ineffective or caused adverse effects.

Use the table below to record which interventions have been tried, when they were tried and give detail if available about the specific medications (including dose), injection or surgery.

A checklist of common pain management interventions:

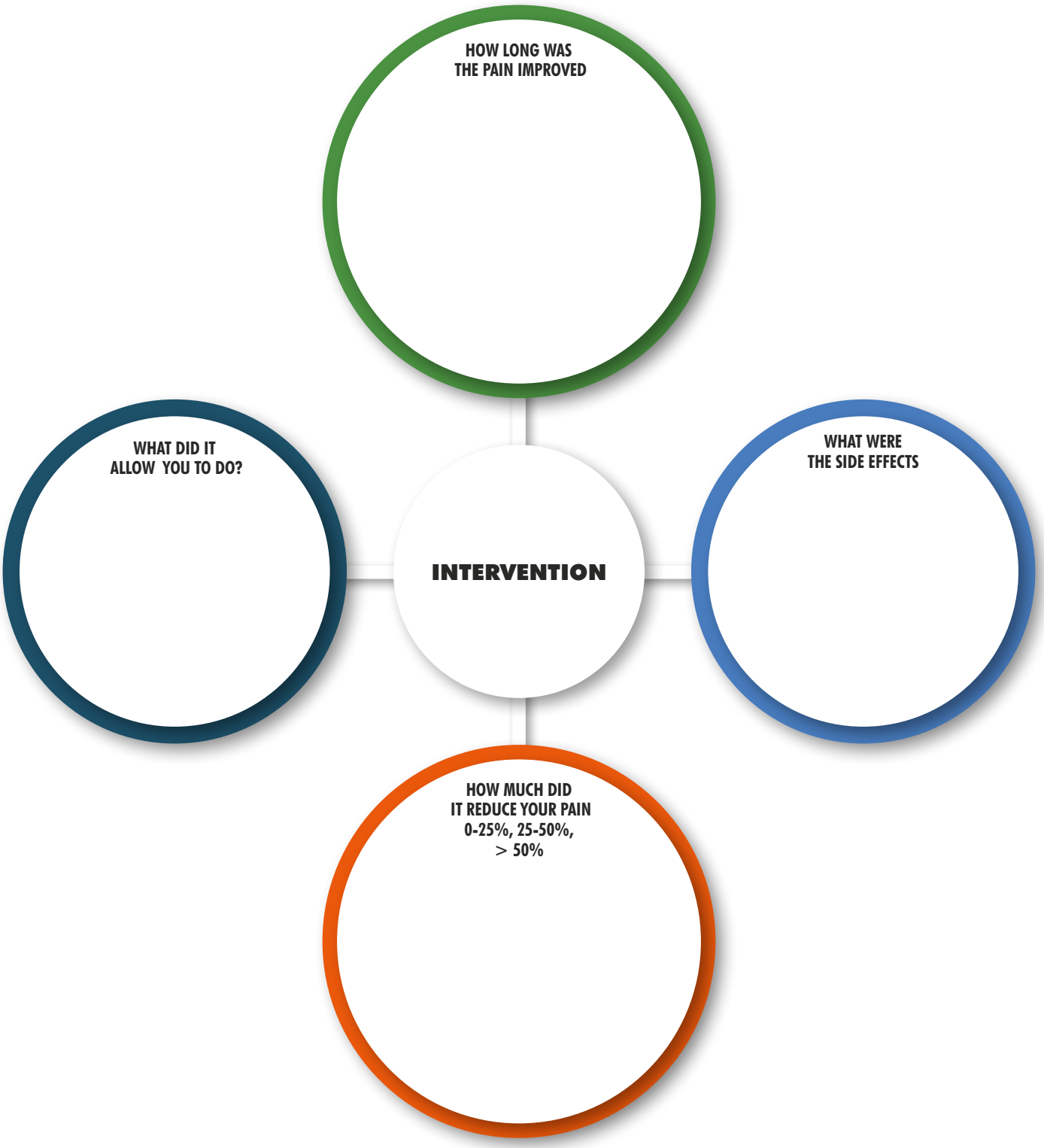
INTERVENTION	TICK	DATE (approx.)	DETAIL
Medication			
Paracetamol			
Anti-inflammatory Medication (Ibuprofen, Diclofenac, Naproxen, Gels)			
Capsaicin cream (Chilli cream)			
Anti-neuropathics (Amitriptyline, Nortriptyline, Gabapentin, Pregabalin, Carbamazepine, Duloxetine)			
Weak opioid (Codeine/ Co-codamol Dihydrocodeine)			
Strong opioids (Tramadol, Oromorph, Morphine Sulphate Tablets (MST), Oxynorm, Oxycontin, Fentanyl patches, Buprenorphine patches)			
Physiotherapy (Including acupuncture and hydrotherapy)			
Chiropractor			
TENS machine			
Injections of local anaesthetic/ steroid into joints including the back			
Surgery			

SECTION 1: ASSESSING PAIN

INTERVENTION

To assist the client and therapist in appraising the efficacy of current and previous interventions

SECTION 1: ASSESSING PAIN



1E. SIGNIFICANT MEDICAL, MENTAL HEALTH AND MEDICATION HISTORY

Medical Conditions

The therapist must gain a complete medical history from the client and where possible clarify this with their community primary care team. Some medical conditions may be the cause of chronic pain. Others may be worsened by pain relieving medications or increase the likelihood of adverse reactions to medication as a result of accumulation in the body.

Medical conditions that may contribute to chronic pain

- Osteoarthritis
- Rheumatoid arthritis
- Diabetes
- Peripheral vascular disease
- Vitamin deficiency (B12, D, Thiamine)
- Shingles
- Osteoporosis
- Previous surgery (-e.g. Amputation, Mastectomy, Chest Surgery, Hernia Repair)
- Previous chemotherapy or radiotherapy
- Multiple sclerosis
- Stroke
- Spinal injury

Medical conditions that may be a contraindication for certain medications or require their use with caution

- Glaucoma
- Difficulty passing urine
- Cardiac disease especially an irregular heart beat
- Kidney Failure
- Liver Failure

Mental Health

Chronic pain and its negative psychological and socioeconomic consequences can exacerbate mental health conditions such as depression and anxiety. Conversely depression and anxiety can contribute to increasing chronic pain, decrease compliance with treatment and make self-efficacy less likely. There is also potential for pain relieving medication to increase anxiety, depression and suicidal ideation.

A history of substance abuse presents a number of challenges:

- Increased pain levels or tolerance to medications
- Poor compliance with prescribe protocols
- Potential diversion of prescribed medications
- Increased risk of dependency
- Increased risk of overdose and drug related death
- Introduction of uncontrolled drug interaction causing significant harm and death

Medication History

A list of the client's current medications and recorded allergies from their community primary care team will avoid potentially harmful drug interactions and recurrence of adverse reactions. It will also provide evidence of pre-admission chronic pain treatment.

SECTION 2: VALIDATION & REALISATION

IMPROVING COMPLIANCE BY IMPROVING UNDERSTANDING

CONTENTS OF THIS SECTION

SECTION 2: VALIDATION & REALISATION

2A. THE DEFINITION OF ACUTE AND CHRONIC PAIN

Long-term or chronic pain is real and effects 20% of the adult population. It is different from short-term or acute pain.

Short-term pain (Acute pain) is a warning to your body that you could be or have been harmed. It tells you to escape from harm or protect an injured part of your body to allow it to heal. For example if you touch a hot object or twist you ankle you will feel pain. The pain causes distress and anxiety as you try to understand the cause and look out for further injury. You express your pain in your emotions and what you say in order to get help. You stop using the injured part of the body to allow it to heal. Then as the body heals the pain reduces and eventually stops allowing you to get back to normal.

Long-term pain (Chronic pain) is a pain that lasts for more than 3 months, beyond any healing process. In the majority of cases it will be there for the rest of your life, increasing and decreasing at different times. Although it hurts as much as short-term pain it is not a warning sign. It may be the result of nerve injury or progressive wear and tear but sometimes no cause can be found. Whatever the cause there is generally no medical cure.

Anxiety, distress and frustration about the pain and what is causing it, along with continuous attempts at protection and resting in the hope of recovery have a massive impact on your ability to work, concentrate, sleep, as well as look after yourself and those close to you. It can be disabling, humiliating and depressing.

You then enter into a reinforcing cycle whereby the consequences of pain including the understandable negative feeling, breakdown of supportive relationships, sleep disturbance and financial pressures with associated anxiety, all contribute to worsening of the pain. Pain management is about supporting you in reversing this destructive process.

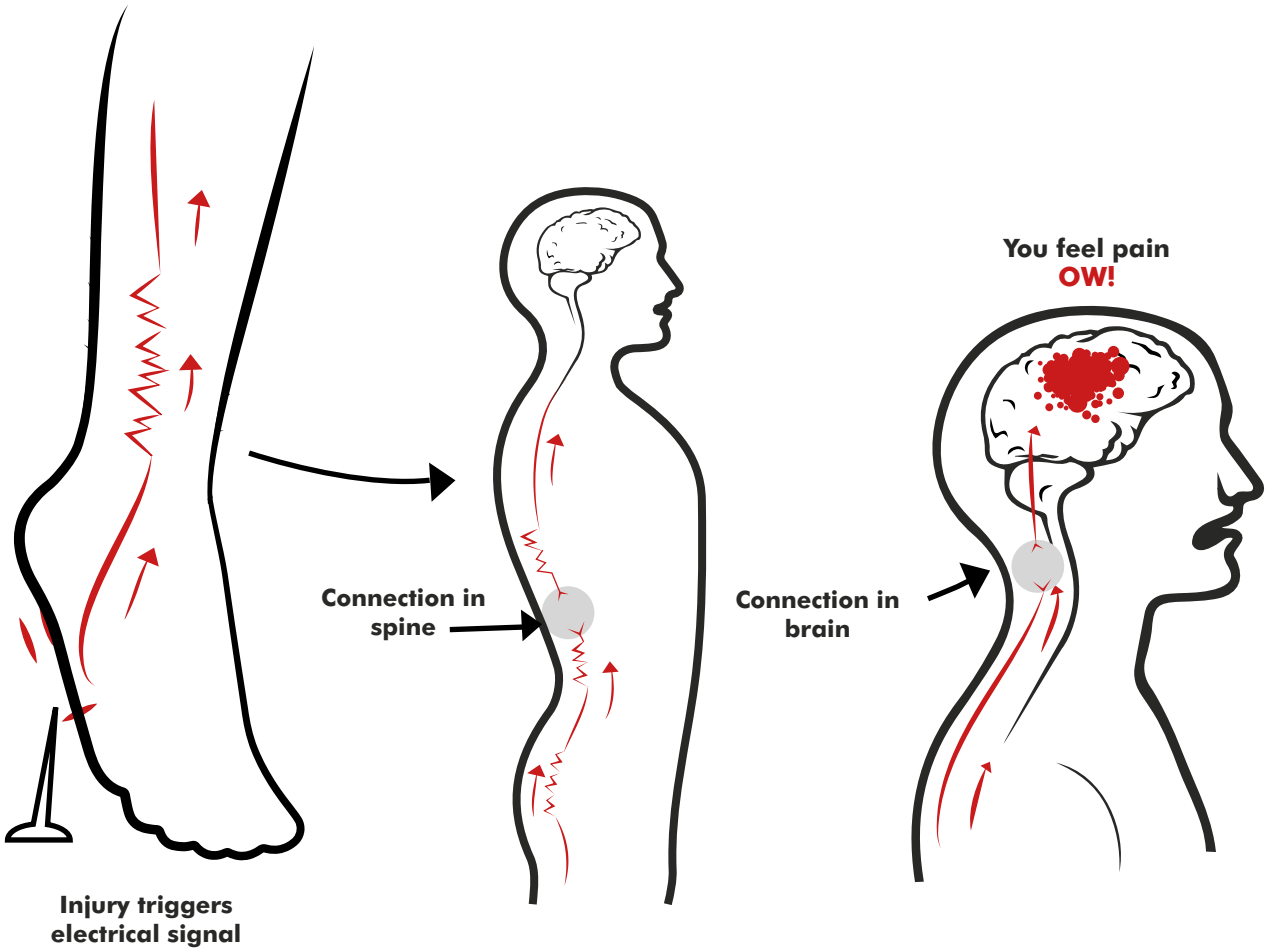
SECTION 2: VALIDATION & REALISATION

2B. THE MECHANISM OF CHRONIC PAIN

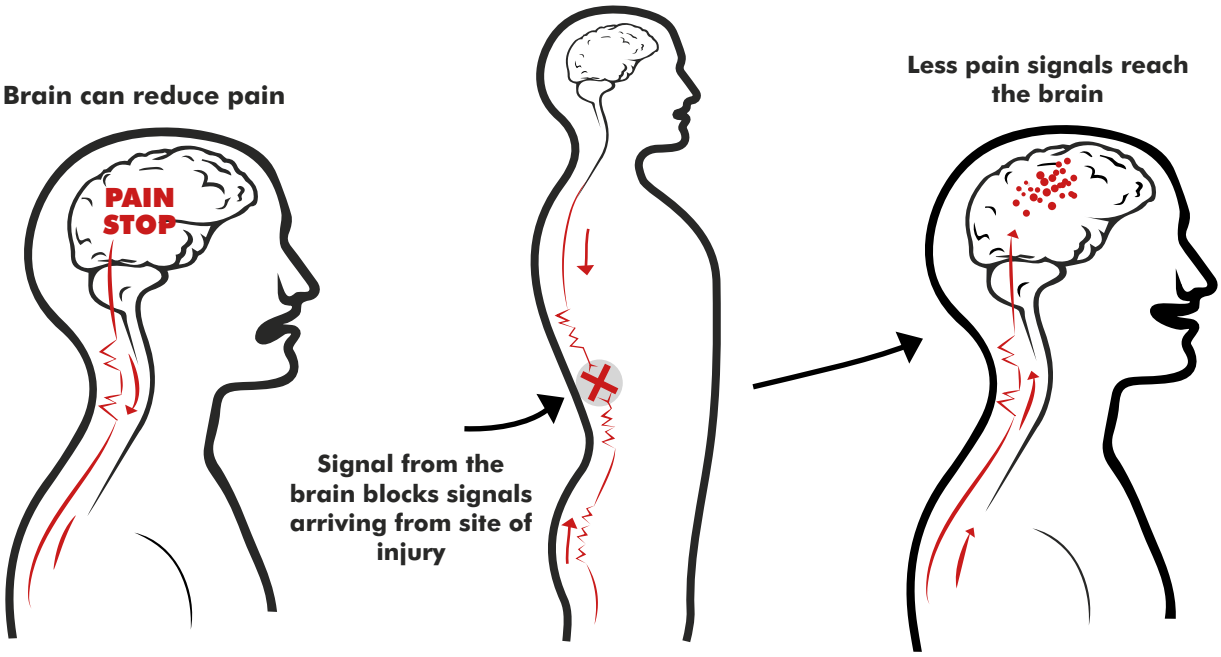
Guiding the client through the steps that have taken place for them to develop chronic pain both validates their experience and provides them with insight into the rationale for the various interventions that will be offered.

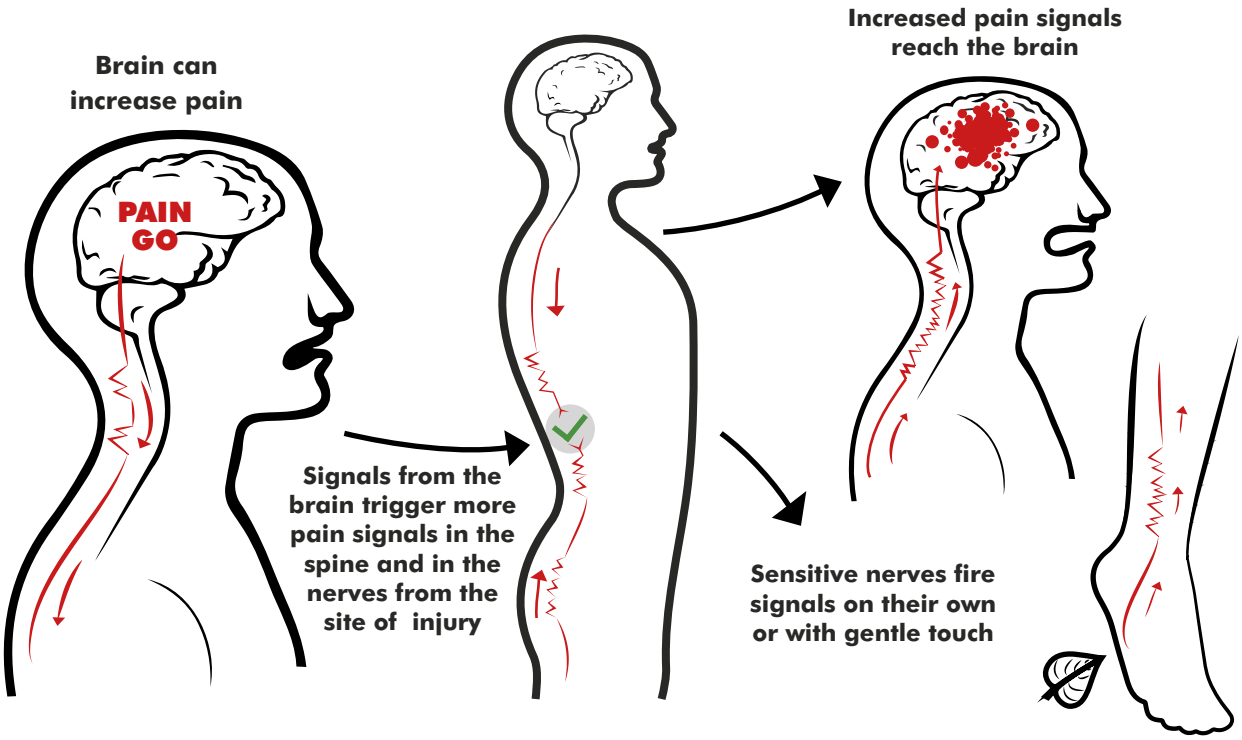
Long-term pain begins when your brain switches from trying to reduce the amount of pain you experience to increasing it. Why it does this is not clear. In some cases it may be that an initial injury was so painful and the pain lasted for so long that it triggered changes in how your pain nerves works.

In others a constant injury like arthritis, wear and tear of the joints, may bring about similar nerve changes. The result is that electrical signals that lead to you feeling pain are increased often to a point where you feel pain continuously without any trigger and you are extremely sensitive even to touch.



SECTION 2: VALIDATION & REALISATION





SECTION 3: UNDERSTANDING THERAPIES

COMBINING THERAPIES TO ACHIEVE MAXIMAL EFFECT WITH MINIMAL SIDE EFFECTS

CONTENTS OF THIS SECTION

3A. LIVING WITH PAIN AND MINDFULNESS

The client should be empowered to take ownership of their pain. They have the greatest control over how much pain they feel and the effect that has on their ability to function.The client should be encouraged to think of themselves as a person 'with pain' as opposed to a person 'in pain'. Their pain should not define them rather it should be only one aspect of their life.

Living with pain

The **Pain Toolkit** is a free NHS-endorsed booklet packed with simple practical advice on how to live better with long-term pain. The author, Peter Moore, has chronic pain, asthma and osteoarthritis and has put these tools together with the help of friends, family and health care professionals.

www.paintoolkit.org/downloads/Pain_Toolkit_patient_booklet_copy_Short_Versions.pdf

Mindfulness

The concept of mindfulness is to see thoughts as a series of mental events. On any given day you will experience a great number of thoughts some of which you unconsciously or consciously ignore and others which go on to generate other thoughts that influence your emotions and behaviour. When you have long-term pain most activities and interactions will have pain in the background. The effect of that is that you associate everything you do with pain. You begin to expect pain and become fearful to the point where you do less and less and become more and more isolated. Mindfulness encourages you to think of thoughts around pain as one of many mental events that don't control you and aims towards a focus on your wider environment with its many positive aspects.

Formal input from a psychologist or trained therapist is required to deliver this therapy effectively.

SECTION 3: UNDERSTANDING THERAPIES

3B. PHYSICAL REHABILITATION (PHYSIOTHERAPY)

Following injury there is a tendency to avoid movement of a painful part of the body. This is a natural response to aid healing and recovery. Avoiding movement in chronic pain makes the problem worse. Immobility leads to stiff joints and weak muscles that increase pain and delay recovery. Also the associated disability and fear of making things worse leads to inactivity and social isolation. This disrupts normal sleep patterns and contributes to low mood, which increase your pain.

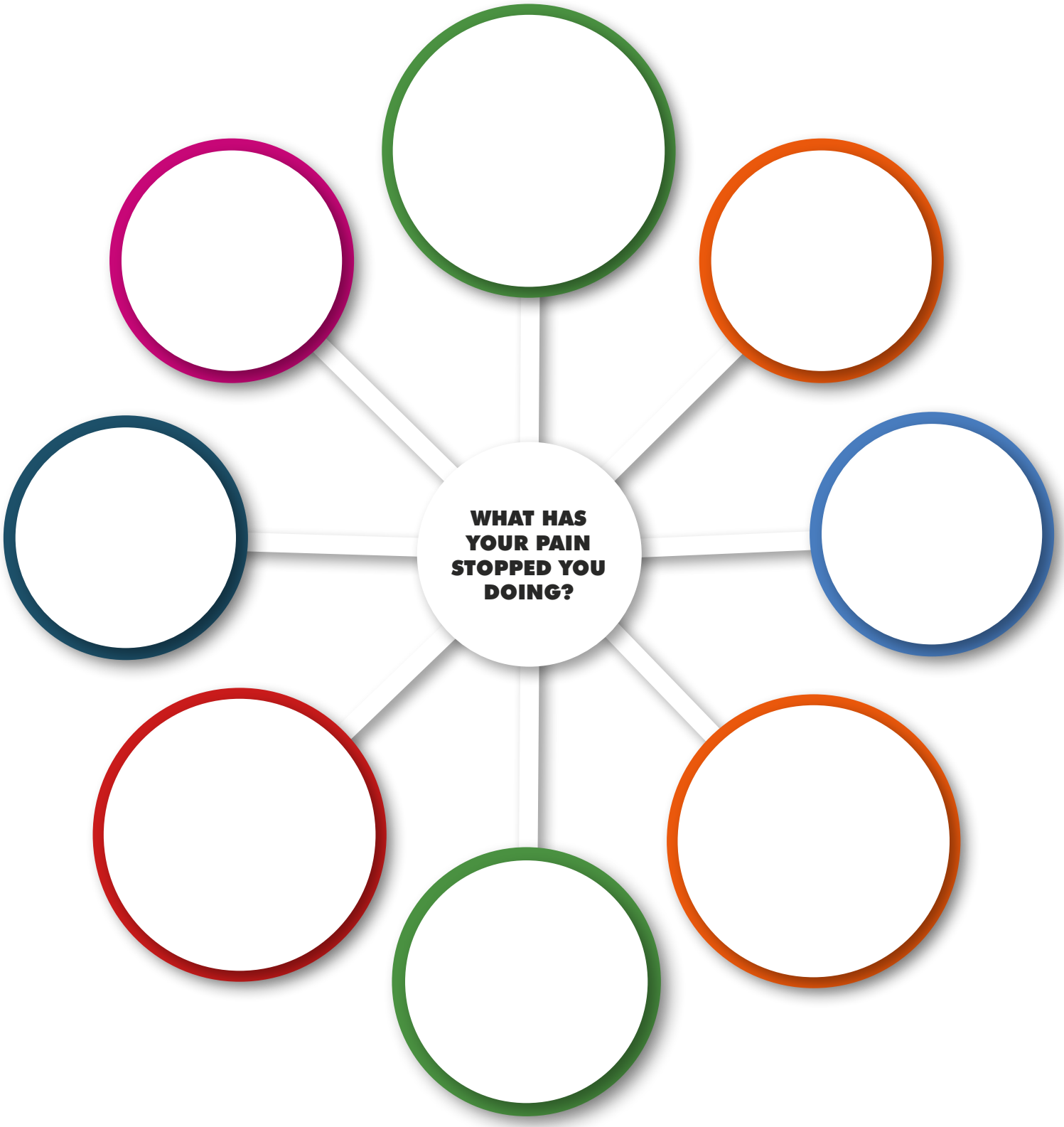
There may also be a tendency of the client to over-exert themselves out of frustration. This can increase pain and set them back further.

Physiotherapy provides exercises to maintain flexibility of joints and muscle strength, reducing stiffness and producing stability that will relieve pain. In addition increased exercise in a controlled manner encourages energy expenditure during the day to improve sleep.

Pacing is also important with the aim of maximising activity in spite of pain while not pushing to a point where the pain is intolerable and disability is increased as a result.

"What activities or jobs is your pain preventing you doing?"

SECTION 3: UNDERSTANDING THERAPIES



SECTION 3: UNDERSTANDING THERAPIES

3C. TENS

TENS is Transcutaneous Electrical Nerve Stimulation. A TENS machine consists of a controller and 2 pads. The pads are applied to the skin either side of a painful area. Electricity passing between the 2 pads produces a pleasant tingling that masks your pain while the machine is on.

It can be used while on the move or when sitting and lying down and can be hidden beneath clothes. There are no side effects and it can be used with medication. It should not be used in clients with epilepsy, applied to numb skin or worn while sleeping.

3D. ACUPUNCTURE

Acupuncture has been practiced for many thousands of years and probably started in China; it uses the stimulation of specific acupuncture points in the body originally using thin needles. It can also involve application of heat, pressure, or laser to these same points. There is a paucity of rigorous scientific evidence about its efficacy in clinical applications but it is widely accepted that acupuncture can be an option for the management of acute and chronic pain conditions. It may be helpful for some headaches e.g. migraine, joint pains e.g. arthritis, spinal pain and some visceral pain e.g. dysmenorrhoea. If is often not helpful for neuropathic pain because it depends on there being a fairly well functioning nervous system and that is not the case in neuropathic pain.

The response to acupuncture is variable and some people seem to be better responders than others - this may be genetic. A client who is a 'strong' responder may do well even if they have a neuropathic pain.

The client usually needs a series of treatments often on a weekly basis; each treatment can take 10-20 minutes. Some clients get prolonged relief but others may need maintenance treatment e.g. monthly.

Acupuncture is generally safe when done with single use sterile needles by appropriately trained practitioners who may be traditional acupuncturists, physiotherapists, nurses or doctors.

3E. MEDICATIONS

When recommended, pain-relieving medications should be taken regularly as prescribed with the aim of improving quality of life and day-to-day function (the ability to achieve normal daily activity).

If a medication is to help it must be taken regularly to maintain a level in the body. Some medications are less effective and some will not work at all if taken only when pain begins or becomes intolerable.

Unfortunately medications are not able to reverse the cause of pain or remove it altogether. Medications are considered effective when pain levels are halved.

More than one medication may be used at the same time to target different areas of the pain pathway and reduce the dose of anyone medication, maximising benefit and minimising side effects.

Medications started or increased that have a negative effect on function and are a long-term risk to health should be reduced or stopped.

How it works

Reduces the electrical signals that cause pain.

If you want to stop

Reduce the amount gradually by reversing the dose changes.

A sudden reduction in dose may cause increased pain and symptoms of anxiety and depression.

Common side effects

- Sleepiness
- Dizziness

Less common side effects

- Weakness
- Unsteadiness
- Swelling in the legs
- Weight gain
- Feeling sick and being sick (Nausea and Vomiting)
- Change in mood (Depression, Anxiety, Aggression, Suicidal Thoughts)
- Joint and Muscle Pains

Gabapentin

What to expect

- 4-6 weeks before there is any reduction in pain
- Stop increasing the dose when pain improved by 50%
- If you get side effects at a particular dose return to lower dose
- Tell your doctor if you develop suicidal ideas

Overdose is associated with loss of control that risks death from injury or over-dose of other substances of abuse.

How to take it

Breakfast	Lunch	Tea	
		100mg	For 3 days
		200mg	For 3 days
		300mg	For 3 days
100mg		300mg	For 3 days
200mg		300mg	For 3 days
300mg		300mg	For 3 days
300mg	100mg	300mg	For 3 days
300mg	200mg	300mg	For 3 days
300mg	300mg	300mg	Continue with this dose

If helpful and tolerated the dose can be increased further to a maximum of 900mg three times a day.

SECTION 3: UNDERSTANDING THERAPIES

Pregabalin

How it works

Reduces the electrical signals that cause pain.

If you want to stop

Reduce the amount gradually by reversing the dose changes.

A sudden reduction in dose may cause increased pain and symptoms of anxiety and depression.

Common side effects

- Sleepiness
- Dizziness

Less common side effects

- Weakness
- Unsteadiness
- Swelling in the legs
- Weight gain
- Feeling sick and being sick (Nausea and Vomiting)
- Change in mood (Depression, Anxiety, Aggression, Suicidal Thoughts)
- Joint and Muscle Pains

How to take it

Breakfast	Tea	
50mg	50mg	For 7 days
100mg	100mg	For 7 days
150mg	150mg	For 7 days
300mg	300mg	Continue with this dose

What to expect

- 4-6 weeks before there is any reduction in pain
- Stop increasing the dose when pain improved by 50%
- If you get side effects at a particular dose return to lower dose
- Tell your doctor if you develop suicidal ideas

Over-dose is associated with loss of control that risks death from injury or over-dose of other substances of abuse

Amitriptyline/ Nortriptyline

How it works

Reduces the electrical signals that cause pain and improves sleep.

If you want to stop

Reduce the amount gradually by reversing the dose changes.

A sudden reduction in dose may cause increased pain and symptoms of anxiety and depression.

What to expect

- 4-6 weeks before there is any reduction in pain
- Stop increasing the dose when pain improved by 50%
- If side effects at a particular dose return to lower dose
- Notriptyline may cause fewer side effects in some people
- Tell your doctor if you develop suicidal ideas

If you are taking antidepressants or have glaucoma, an irregular heartbeat or difficulty passing urine tell your doctor before starting this medication.

Common side effects

- Sleepiness
- Dizziness

Less common side effects

- Dry mouth
- Constipation
- Difficulty with passing water
- Palpitations
- Blurring of vision
- Disorientation, anxiety, agitation

Overdose can cause

- Seizures
- Coma
- Irregular heart
- Death

How to take it

Week 1	10mg at night
Week 2	20mg at night
Week 3	30mg at night
Week 4	40mg at night
Week 5	50mg at night and continue with this dose

How it works

Reduces the electrical signals that cause pain.

How to take it

You will be started on 60mg once per day and this may increased to 120mg.

Duloxetine

Common side effects

- Dry mouth
- Headache
- Sleepiness
- Dizziness
- Feeling sick (Nausea)

Less common side effects

- Constipation
- Difficulty with passing water
- Palpitations, Flushing and Sweating
- Blurring of vision
- Change in mood (Depression, Anxiety, Aggression, Suicidal Thoughts)
- Joint and Muscle Pains
- Loss of Appetite and Weight Loss
- Increased Blood Pressure

Overdose can cause

- Seizures
- Coma
- Irregular heart rate
- Increased blood pressure

What to expect

- 4-6 weeks before there is any reduction in pain
- Tell your doctor if you develop suicidal ideas

If you are taking antidepressants or have glaucoma, an irregular heartbeat or difficulty passing urine tell your doctor before starting this medication.

How it works

Reduces the electrical signals that cause pain.

Overdose can cause

- Seizures
- Coma
- Breathing to slow then stop

If you want to stop

Reduce the amount gradually by reversing the dose changes.

Carbamazepine

What to expect

- 4-6 weeks before there is any reduction in pain
- Stop increasing the dose when pain improved by 50%
- If you get side effects at a particular dose return to lower dose
- Tell your doctor if you develop suicidal ideas

How to take it

Breakfast	Tea	
100mg	100mg	For 7 days
100mg	100mg	For 7 days
200mg	200mg	For 7 days
Continue to increase in 100mg increments every 7 days		
600mg	600mg	

Common side effects

- Balance or coordination problems
- Blood and bone marrow problems causing bleeding, bruising and increased risk of infection
- Dizziness
- Nausea
- Skin rashes
- Sleepiness
- Vomiting
- Double/blurred vision
- Dry mouth
- Fluid retention
- Headaches
- Weight gain

Less common side effects

- Abnormal movements of limbs and eyes
- Constipation/diarrhoea
- Blood pressure changes
- Heart problems
- Liver problems
- Loss of appetite
- Muscle weakness
- Numbness and pins and needles
- Slurred speech
- Stomach pain
- Change in mood (Depression, Anxiety, Aggression, Suicidal Thoughts, Hallucinations)

If you have problems with your liver, bone marrow or mood tell your doctor before starting this medication.

SECTION 3: UNDERSTANDING THERAPIES

Local anaesthetic patches

How it works

The patch numbs the skin in the area of pain.

How to use

Apply to skin over area of pain.

A patch should not be applied to broken skin.

The patch should be worn for 12 hours and removed for 12 hours.

Up to 3 patches can be worn at a time.

Dispose of the patch carefully

If a child or animal puts the patch in their mouth the dose of anaesthetic can be fatal.

The only side effect is skin irritation.

Capsaicin Cream

How it works

Activates, overwhelm and then deactivates the pain nerves in the skin.

How to use

Apply to skin over area of pain .

The cream should not be applied to broken skin.

The cream should be applied 3 times per day every day for 4 weeks initially.

Continue if helpful.

What to expect

Applying the cream causes a burning sensation that is not harmful.

Avoid unintentional spread of the cream to sensitive areas such as the eyes, genitals, and anus.

4 weeks before there is any reduction in pain.

The only side effect is skin irritation.

SECTION 4: OPIOID MANAGEMENT

FOR THE MAJORITY, STRONG OPIOIDS ARE PART OF THE PROBLEM NOT THE SOLUTION

CONTENTS OF THIS SECTION

4A. OPIOID CLASSIFICATION & MORPHINE EQUIVALENCY

Opioids are Morphine or Morphine-Like medications and are classified as weak or strong. There is no clear evidence that opioids improve quality of life, mood or function in chronic pain and so in general strong opioids should not be used in order to avoid long-term harm (see below).

Strong Opioids

- Tramadol
- Morphine Sulphate (Tablets (MST) or Oromorph)
- Oxycodone (Oxycontin or Oxynorm)
- Methadone
- Fentanyl Patches
- Buprenorphine Patches

Weak Opioids

- Codeine
- Dihydrocodeine
- Co-Codamol - Codeine And Paracetamol

'Morphine equivalency' is used to guide conversion of one opioid to another but can also be used to express the extent of opioid exposure. Quantifying exposure can be a useful starting point when discussing efficacy verses potential risk. For example 'With your combination of liquid morphine, tablets and patches you are taking the equivalent of 800mg of morphine per day yet your pain is only improved by around 20% and you are no more active. Your risk of long-term harm from these medications at that dose is significant and they are likely to be making your pain worse.'

SECTION 4: OPIOID MANAGEMENT

DRUG NAME	DRUG DOSE	EQUIVALENT ORAL MORPHINE DOSE
Codeine	3omg	3mg
Dihydrocodeine	10mg	1mg
Tramadol	50mg	5-10mg
Oxycodone	10mg	20mg
Butrans 5 Butrans 10 Butrans 20	5mcg/hour 10mcg/hour 20mcg/hour	10mg/24 hours 20mg/24 hours 40mg/24 hours
Fentanyl 25 Fentanyl 50 Fentanyl 75 Fentanyl 100	25mcg/ hour 50mcg/ hour 75mcg/ hour 100mcg/ hour	30-134mg/24 hours 135-224mg/24 hours 225-314mg/24 hours 315-404mg/ 24 hours
Transtec 52.5 (Buprenorphine) Transtec 70 (Buprenorphine)	52.5mcg/ hour 70mcg/ hour	94-145mg/ 24 hour 126-193mg/24 hours

Adapted from **wales.nhs.uk**

SECTION 4: OPIOID MANAGEMENT

4B.THE ROLE OF OPIOIDS IN PAIN MANAGEMENT

Strong opioids are most appropriate for short-term use as part of the WHO analgesic ladder in the management of acute and cancer pain.

The WHO analgesic ladder

1. Paracetamol
2. Paracetamol + Anti-inflammatory (-e.g. Ibuprofen)
3. Paracetamol + Anti-inflammatory + Weak Opioid (-e.g. Codeine Phosphate, Co-codamol, Dihydrocodeine)
4. Paracetamol + Anti-inflammatory + Strong Opioid (-e.g. Tramadol, Morphine, Oxycodone, Fentanyl or Buprenorphine Patches)

Examples in chronic pain where opioids might be appropriate are severe and diffuse arthritis not appropriate for surgery or as a short-term measure to allow engagement with other management strategies and rehabilitation. The aim should be to minimise the dose required by combining an opioid with other medications and therapies. Ideally all clients should spend as little time as possible taking opioids and the dose should be as low as possible. Prolonged use of strong opioid will lead to tolerance (with the need for an increasing dose to have any effect) and increases the risk of:

- Potential reduction in the ability to fight infection
- Reduced release of a hormone, resulting in loss of libido, infertility, fatigue, depression, anxiety, loss of muscle mass and strength, thinning of the bones with an increased risk of fracture, erectile dysfuction (The Inability To Keep An Erection) and irregular periods
- And an increased pain levels and sensitivity to pain (Opioid Induced Hyperalgesia).

If strong opioids are to be used the dose should be increased gradually to a maximum of 120mg oral morphine equivalency in 24 hours using sustained-release not short-acting (e.g oromorph or oxynorm liquids) preparation. If there has been no significant improvement in the client's pain or activity by 120mg then it should be tapered down and stopped.

Opioid Induced Hyperalgesia

This opioid-triggered pain is like a widespread nerve injury (neuropathic) pain with burning, tearing, stabbing and hypersensitivity. It is caused by the accumulation of chemicals that increase the sensitivity of the pain nerves. Reducing and stopping strong opioids can reverse it and may actually reduce pain levels.

SECTION 4: OPIOID MANAGEMENT

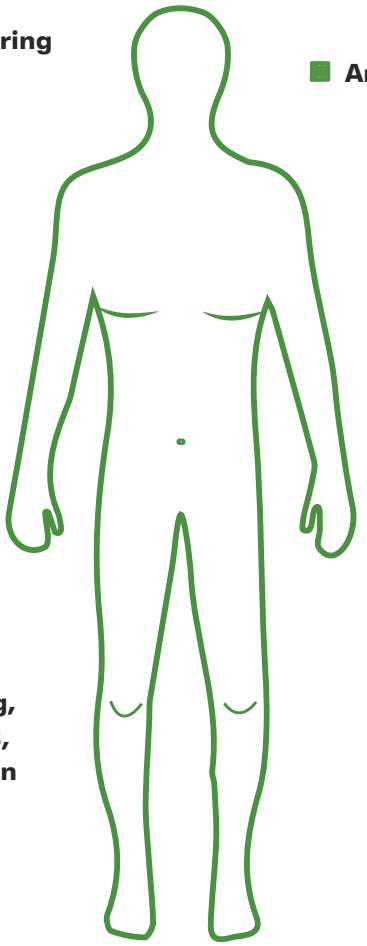
4C. OPIOID WITHDRAWAL AND ITS MANAGEMENT

Having overcome the significant hurdle of persuading the client to cooperate with strong opioid reduction it is vital these are tapered gradually and sympathetically. Minimising the distressing side effects will hopefully avoid loss of trust, anger and alternative sourcing of opioids that undermine the rest of your agreed pain management plan.

Increased production of a stimulating hormone (noradrenaline) in response to the sedative effect of strong opioids mean that the body enters an overexcited state when opioids are reduced and stopped.

This overexcited state is distressing, confusing and sometimes painful but it is short-lived and not harmful.
The therapist should work closely with the client to agree a tapering regimen and provide reassurance, support and treatment that minimises the distress during this difficult but ultimately rewarding time.

THE CLIENT MAY EXPERIENCE SOME OR ALL OF THESE SYMPTOMS



- Eye watering
- Anxiety
- Sweating
- Runny nose
- Palpitations
- Dilated pupils
- Muscle aches
- Yawning
- Insomnia
- Abdominal cramping
- Goose bumps
- Diarrhea
- Itchiness, tingling, pins and needles, burning or pain in the skin
- Nausea and Vomiting

Tapering Regimen

For those on controlled release Morphine or Oxycodone it is reasonable to decrease the dose by 10-20% every 5 days and then in 10mg increments when the dose is 40mg/24 hours.

For those with patches it will be necessary to convert a proportion of this to an oral; sustained-release opioid to allow gradual reduction. For example a 50mcg/hr Fentanyl patch could be converted to a 25mcg/hour patch and Morphine Sulphate Continus 60mg twice daily and the tablets then reduced gradually.

When using morphine equivalency to calculate an appropriate dose of oral opioid to supplement an opioid patch be aware that absorption of the drug through the skin can vary significantly and hence ranges are given as a opposed to a discrete figure (See morphine equivalency table). There is also a 24 hours lag with regards lowering of opioid level in the body after a patch is removed. Therefore oral replacement should be conservative and under supervision to observe for signs of overdose.

Treating symptoms of withdrawal

- Sweating, Agitation, Palpitations, Cramping- **Lofexidine**
- Restlessness and insomnia- **Chlorphenamine, Promethazine**
- Muscle aching- **Non-steroidal anti-inflammatory**
- Abdominal Cramping- **Buscopan**
- Nausea and Vomiting- **Metoclopramide**
- Diarrhoea- **Loperamide**

4D. PATIENTS ON METHADONE

Clients on methadone as part of their recovery from drug dependence may also have chronic pain or develop acute pain following injury or as part of an acute illness.

Reducing methadone in the presence of chronic pain may cause increased pain levels that need to be assessed for their potential cause. Consideration can then be given to commencing alternative analgesics and developing a pain management plan to reduce the impact of this pain.

Methadone can be used to manage chronic pain especially neuropathic pain that has not responded to other treatment. Unlike other opioids, tolerance is unusual. If a client has experienced adequate pain control on a particular dose of the methadone but then develops uncontrolled pain this is either the result of significant disease progression, a new cause of pain or increased breakdown of the drug (Agents that may DECREASE methadone concentrations include Antiepileptics: carbamazepine, phenobarbital, phenytoin (no interaction with valproic acid and gabapentin), Antipsychotics: risperidone, Antiretrovirals: nevirapine, ritonavir, Antibiotic: rifampin).

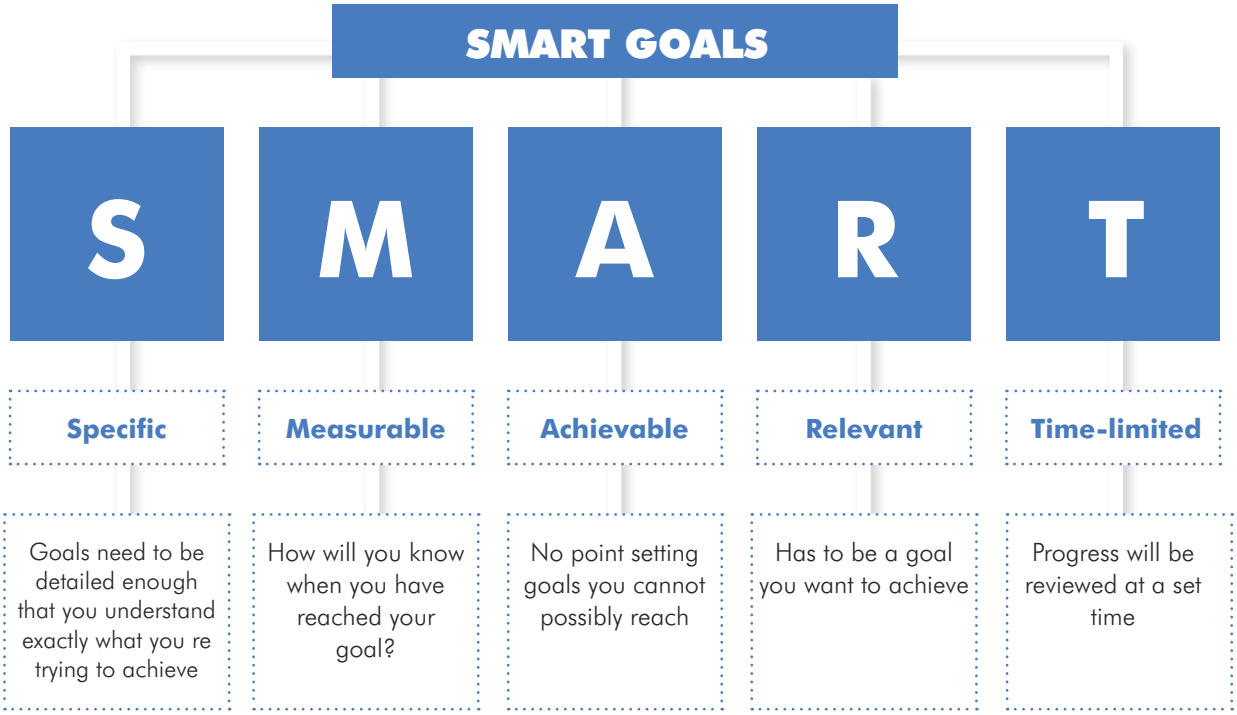
Changing the timing of a longstanding methadone dose can be helpful in acute pain. The long half-life of methadone (The time it takes to clear it from the body) means that a once daily dose can be divided in two 12 hourly doses to improve pain control without causing symptoms of withdrawal.

SECTION 5: SETTING AND ACHIEVING GOALS

SETTING GOALS THAT RELATE TO IMPROVED ACTIVITY AND RELATIONSHIPS OFFER TANGIBLE AND ACHIEVABLE TARGETS THAT EMPHASISE PAIN MANAGEMENT AND NOT PAIN RESOLUTION. PAIN MANAGEMENT IS A COMBINATION OF IMPROVING QUALITY OF LIFE AND PAIN LEVELS

CONTENTS OF THIS SECTION

5A. SMART GOALS



SECTION 5: SETTING AND ACHIEVING GOALS

5B. GOAL PLANNING

Ask the client to consider the impact of their pain (Section 1a). Then consider the extent to which any particular situation can be improved, setting goals around nullifying the impact of the pain as oppose to the pain itself. What do they want to get back to doing? How can we achieve that?

Use the table below to detail the impact, discuss ideas to change things and set goals that address these concerns and improve pain management.

IMPACT AREA	DETAIL	IDEAS	GOALS
Sleep	I sleep for 2–3 hours per night. I don"t feel refreshed and I have no motivation. I sleep a lot through the day.	Avoid daytime sleeping. Avoid caffeinated drinks. Start to exercise ideally outside. Learn relaxation techniques. Try amitriptyline.	Practice relaxation techniques. Limit daytime sleeping to 30 minutes. Sleep for 4 hours per night.
Activity	I sit around all day or lie down a lot only going out to occasional appointments. I am afraid to go out or exercise because I tire easily and everything is painful. I push myself until the pain is unbearable and then I can"t move.	Pace activity. Increase slowly and avoid doing too much in one go. Work on exercises with physiotherapist to gradually develop flexibility. Plan your day to focus on activities rather than the pain. Choose activities that require concentration (Read, drawing, computer game, making models) Learn a new skill.	Walk for 30 minutes. Do your physiotherapy exercises. Read for 30 minutes. Work on a puzzle for 30 minutes.
Work	I can"t sit in one place all day. I can"t lift heavy objects. I can"t sit in a car all day.	Could you adapt your current job to allow you to continue? Are there any other jobs you could do? Is there an opportunity to train in another job that is more appropriate?	Take some careers advice. Get support from occupational health. Learn a new skill.
Friends	I don"t speak to anyone anymore– It"s easier to be on my own. They don"t believe I am in pain.	Take time to speak to a friend. Plan to talk about topics that are not related to your pain. Show an interest in what they are doing. Consider how you could meet your friends without increasing your pain.	Speak to a friend every week and meet face to face once a week.
Relationships	My partner and children have lost respect for me. I get angry with my partner and children. They have lost sympathy for me. I do nothing to help. I am not interested in anything. We never do anything together.	Recognise when you are becoming impatient and angry and use techniques to relax. Offer to help. Show an interest in what they are doing. Think of something you can do together that you both enjoy.	Practice Relaxation Techniques. Offer to help with homework, cooking, cleaning, shopping everyday. Take time to talk about them and what they have been up to. Plan to do something nice together every week.
Medications	I don"t think they make my pain any better. I feel tired and sick all the time. I don"t want to take regular medication.	You may benefit more from different medication. You may not be taking the medications often enough. You may be able to stop a medication with no effect on your pain but benefit from not having the side effects.	Discuss your concerns with a medical professional before stopping medications. Take medication regularly. Slowly reduce medication by x mg/week.

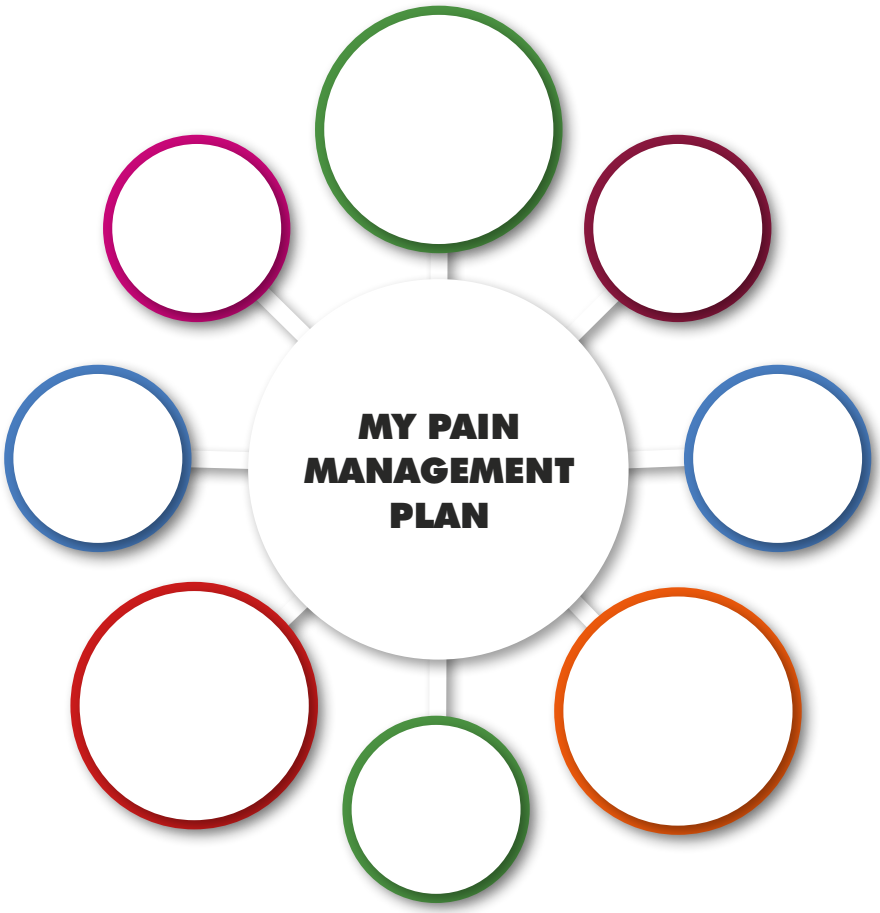
SECTION 5: SETTING AND ACHIEVING GOALS

IMPACT AREA	DETAIL	IDEAS	GOALS
Sleep			
Activity			
Work			
Friends			
Relationships			
Medications			

SECTION 5: SETTING AND ACHIEVING GOALS

5C. MY PAIN MANAGEMENT PLAN

My Pain Management Plan allows the client to summarise the various aspects of their pain management plan including medication changes, addition of other therapies (e.g. TENS or relaxation techniques), involvement of other therapists (Physiotherapist, Psychologist), and changes in their lifestyle, interaction with others and coping strategies.

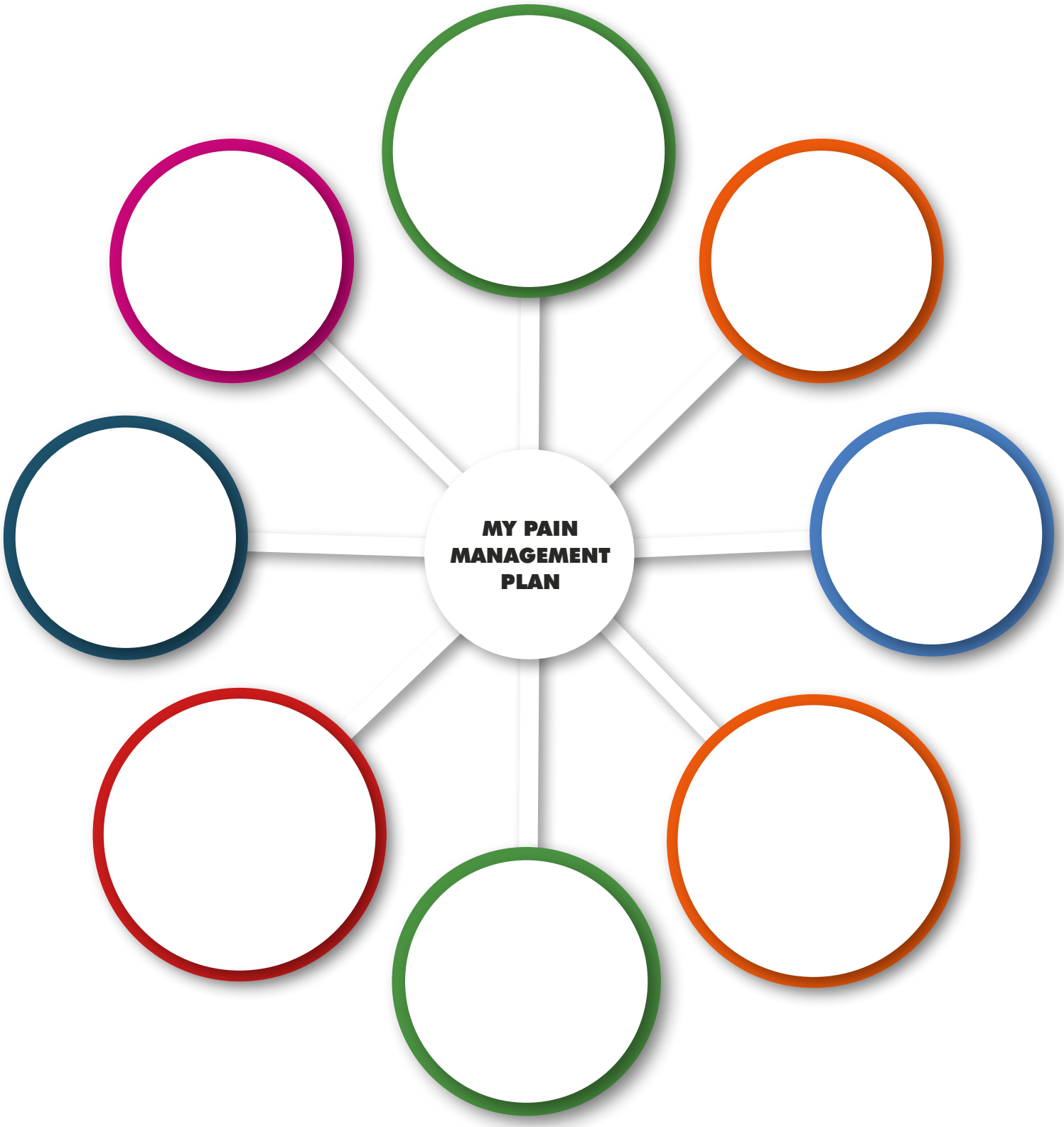


5D. REFLECTIVE DIARY

A Reflective Diary allows the client to note positive and negative experiences and reflect on the factors that contributed to them and the impact they had on their emotions and pain levels.

POSITIVE EVENT	NEGATIVE EVENT
Event:Played pool all afternoon. **Contributing Factors:** Started talking to a few friends and ended up playing pool. **Emotions:** Relaxed and confident. **Pain level:** 4/10	**Event:** Didn't speak to anyone today. **Contributing Factors:** Hardly slept at all last night I feel everyone is judging me and laughing at me. Everyone thinks I am a scrounger. **Emotions:** Feel lonely and depressed. **Pain Level:** 8/10

SECTION 5: SETTING AND ACHIEVING GOALS



SECTION 5: SETTING AND ACHIEVING GOALS

POSITIVE EVENT	NEGATIVE EVENT
Event:	**Event:**
Contributing Factors:	**Contributing Factors:**
Emotions:	**Emotions:**
Pain level:	**Pain Level:**

SECTION 6: THE NEXT STEP

ACKNOWLEDGING ACHIEVEMENT, CONSOLIDATING SELF-EFFICACY AND ESTABLISHING SUPPORT AND REVALUATION IF PAIN MANAGEMENT DECLINES

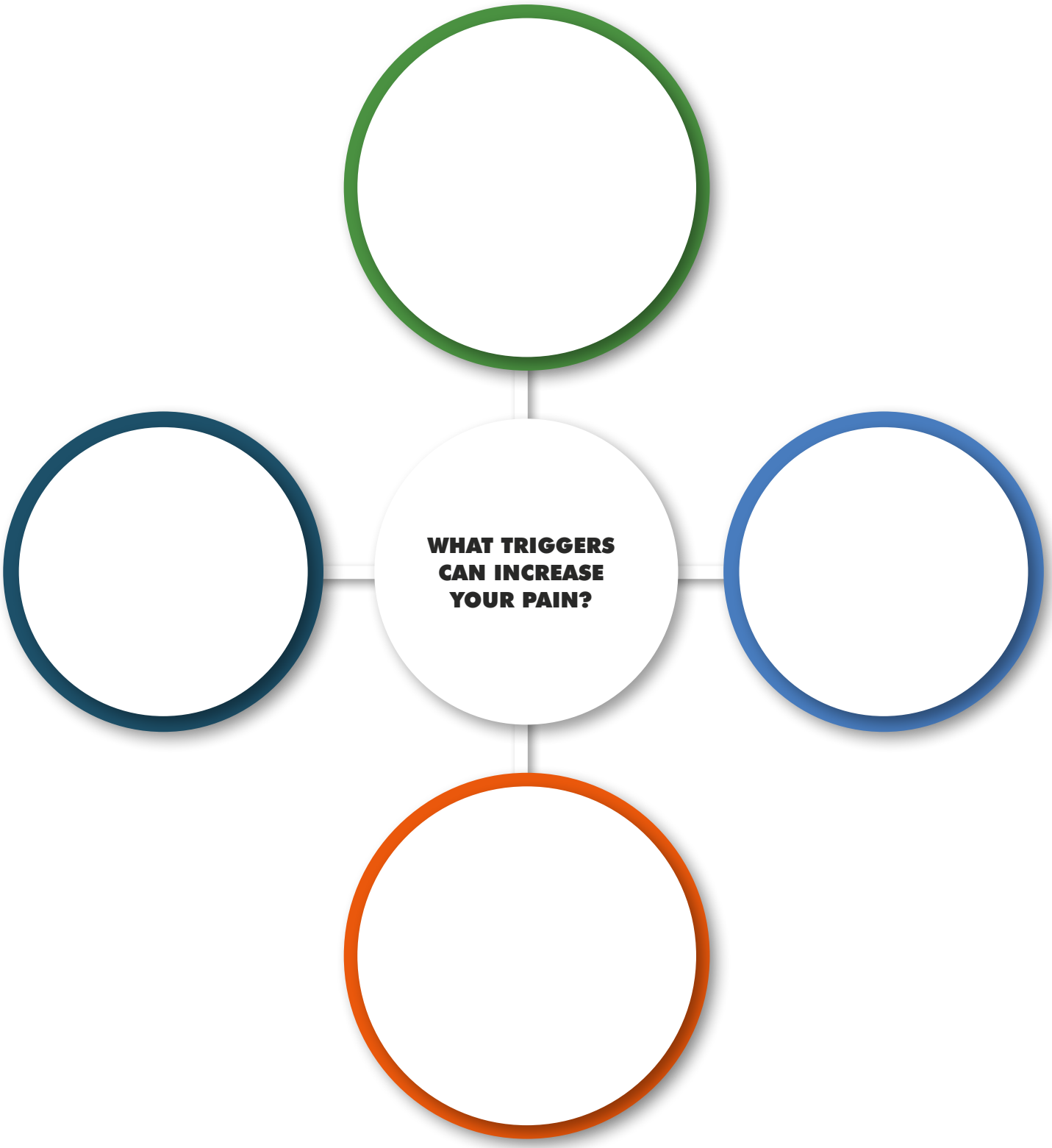
Chronic pain is a disease with a great number of causes and is a dynamic process. Any one cause may be associated with increases and decreases in pain levels. In addition degenerative change may progress or new causes may develop that increase pain and disability. Encouraging the client to reflects on their pain prevention and management strategies and appreciate the need for re-evaluation will equip them to adapt to these changes in the most constructive manner.

Some changes may represent the beginnings of a reversible or treatable disease process or warrant surgical intervention where previously this wasn't appropriate.

Treatments effective now may become ineffective and those that had no effect may make a valuable contribution in the future.

Empowering a client to manage their own pain is vital but a willingness to reassess and modify the pain management strategy with time is also important for the therapist and client.

SECTION 6: THE NEXT STEP



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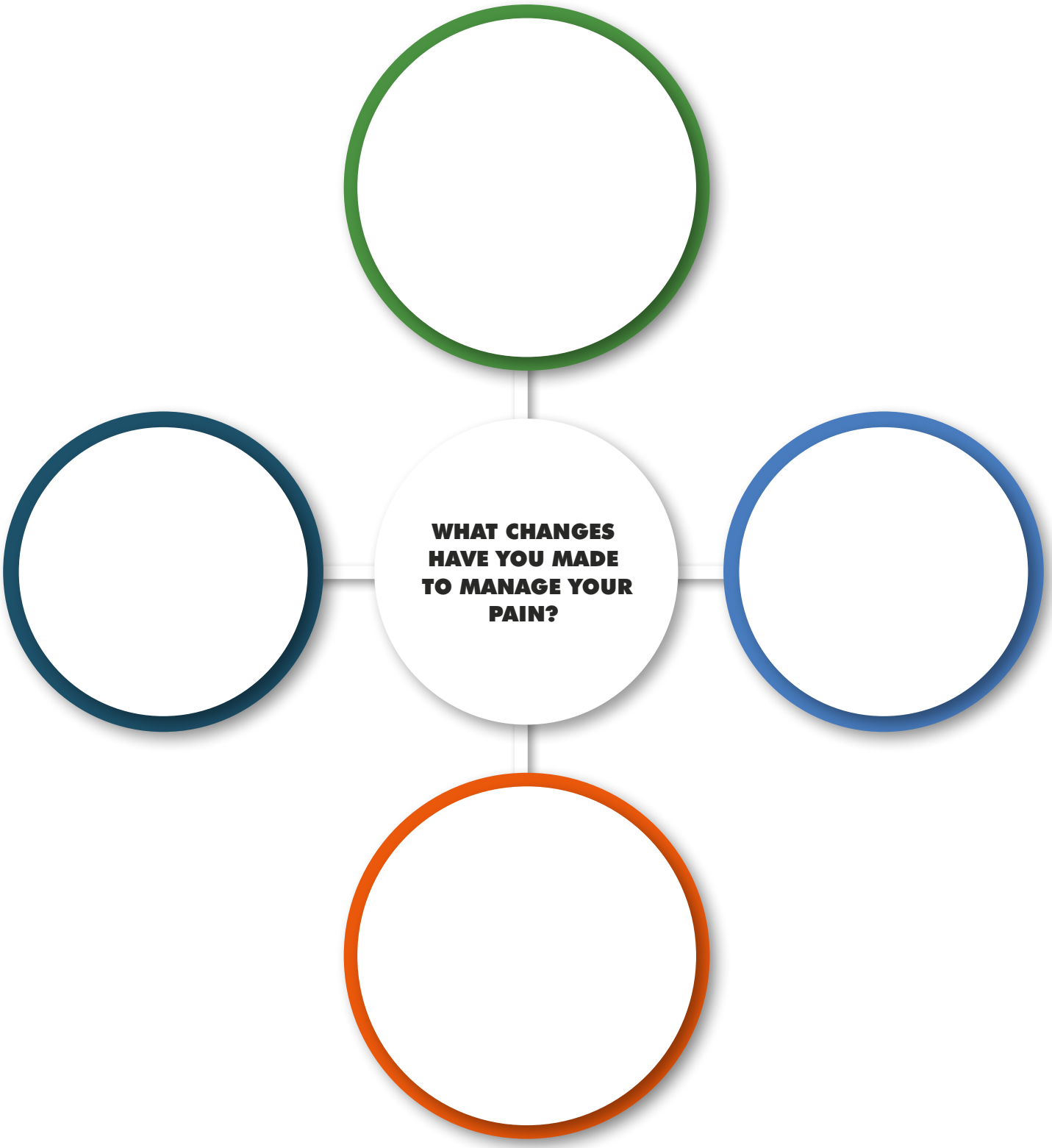

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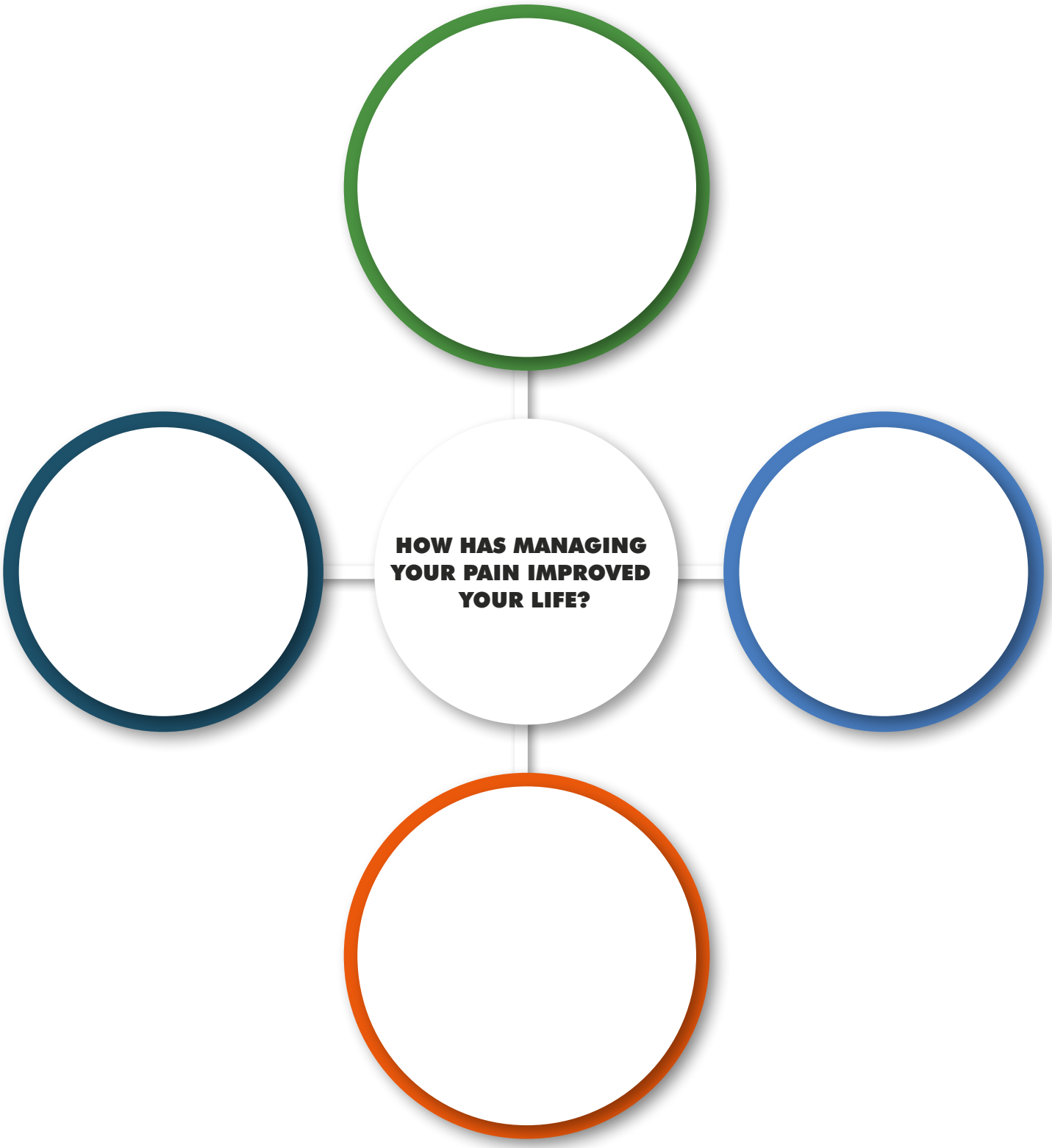

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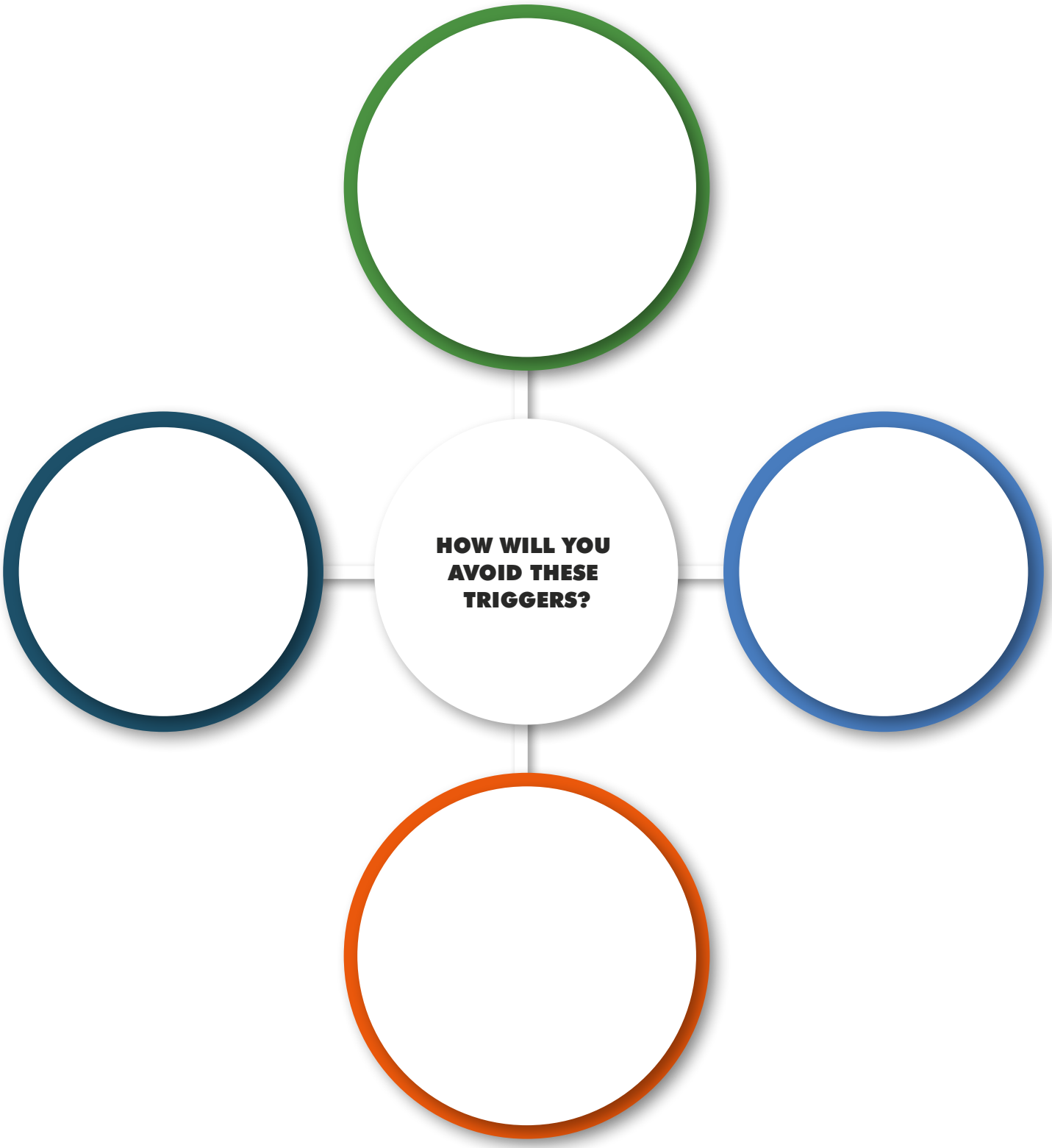

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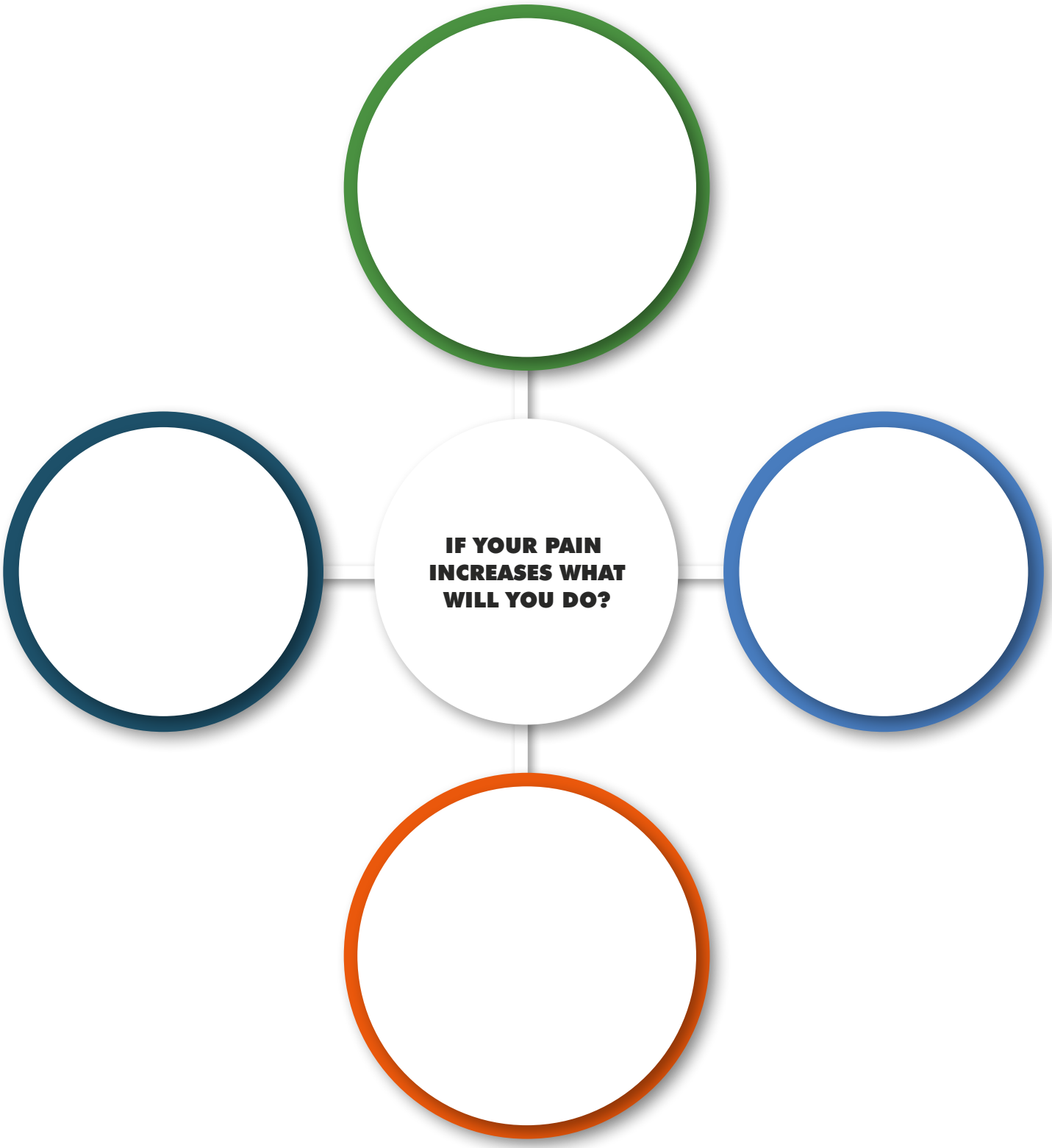
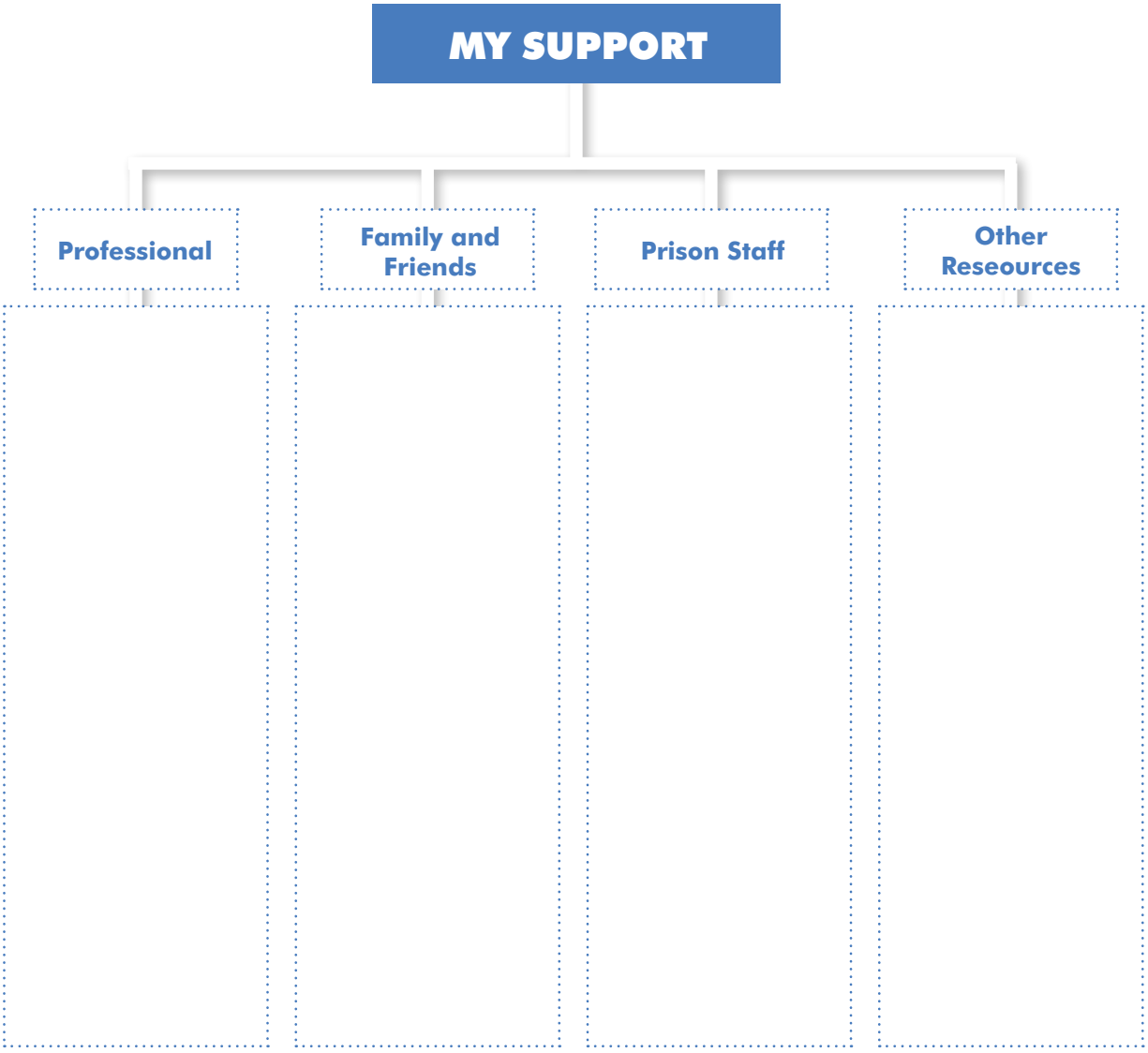


SECTION 6: THE NEXT STEP

My Support establishes the on-going support available. The client should fill in the names and contact details of individuals they can turn to and organisations and resources they can access if the pain changes or becomes unmanageable. The aim is that the client can access the support they need to reassess their pain and prevent re-establishment of negative behavioural patterns.



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