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### COLLECTION OF DATA

We collect non-personally identifiable data (which is transmitted back to us) through the App regarding the use of the App in order to better understand use of the App and to help us identify areas for improvement.

The App also allows users to enter certain identifying information and personal health information, which they can then choose to transmit directly to their health care provider by email. Any such information is not collected by us and no copy is sent to us by the App. Please keep in mind that information sent by email is not encrypted and may be subject to interception by third parties.

"Having chronic pain made me feel like I lost control over my life. Reading this book has given me the confidence to discuss my treatment with my doctor instead of just following his instructions. No matter how qualified your healthcare provider, it's a great feeling to take back some control. I want to be involved in my care."

-Sam

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#### **PREFACE**

The My Opioid Manager Book accompanies the My Opioid Manager App. Together, they are a patient education tool, to help people understand and manage their pain, and in particular, through using opioids. The intention is to empower people so that they are better able to make informed choices jointly with their healthcare provider.

The My Opioid Manager Book and App is the output of a project of Toronto Rehabilitation Institute, University Health Network.

In 2010, Dr. Andrea Furlan, a Physician and Scientist at Toronto Rehabilitation Institute, developed a tool for physicians prescribing opioids for patients with chronic non-cancer pain. This tool is called the Opioid Manager™. In 2012, the Opioid Manager™ was converted to an App for smartphones and tablets.

The My Opioid Manager Book (and App) is intended to complement the Opioid Manager™ by providing the same information in a format that can be used by patients with chronic pain who are on opioids, or by patients who are not on opioids but who might be considering this option to help manage their chronic pain.

A critical aspect of opioid management is the patient's understanding and ability to track their own situation. The My Opioid Manager Book and App is, therefore, aimed at helping patients better understand their pain condition, the potential complications from using opioids, and adverse effects. With this information they can improve their ability to make informed decisions jointly with their healthcare provider.

### **ACKNOWLEDGEMENTS**

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We are grateful for technical and consulting services provided by our two partners: (i) LearningLabs: John Shepherd, Karla Badger-Brown and Brian Lingley, and (ii) NetFunctional: Van Le.

We are also indebted to the patients and clinicians who reviewed the content of this book and made great suggestions to improve the clarity and quality of the information presented.



#### INTRODUCTION

How to use this book

Welcome to My Opioid Manager. By reading this book, you're taking a step forward towards better understanding chronic non-cancer pain management using opioids. This book and associated app were created by clinicians who work in chronic pain management. It is our goal to take the knowledge we give our patients every day and make it more widely available to everyone. Reading this book will help you to prepare for a discussion with your healthcare provider so you can make the most out of your time in your appointment.

It can be a big decision to decide if opioids are right for you. This book will help guide you through the process that your healthcare provider will take when considering opioids as part of your treatment plan. We've included some information that you need to know before starting opioids and many of the screening tools that will help determine if opioids are safe for you. We've also included the steps to work through to determine if you've been successful in managing your pain with opioids.

While many treatment options exist for chronic pain, this book focuses on opioids because they can be one of the more dangerous and misunderstood treatments. In this book, we've addressed many of the common questions and concerns that we hear about from patients. It is our hope that with the right information presented to you at the right time, you can make the

"I always suspected that emotions affected my pain, but I wasn't sure. Finally, I have an explanation that makes sense. Chronic pain is very complicated."

Meghan



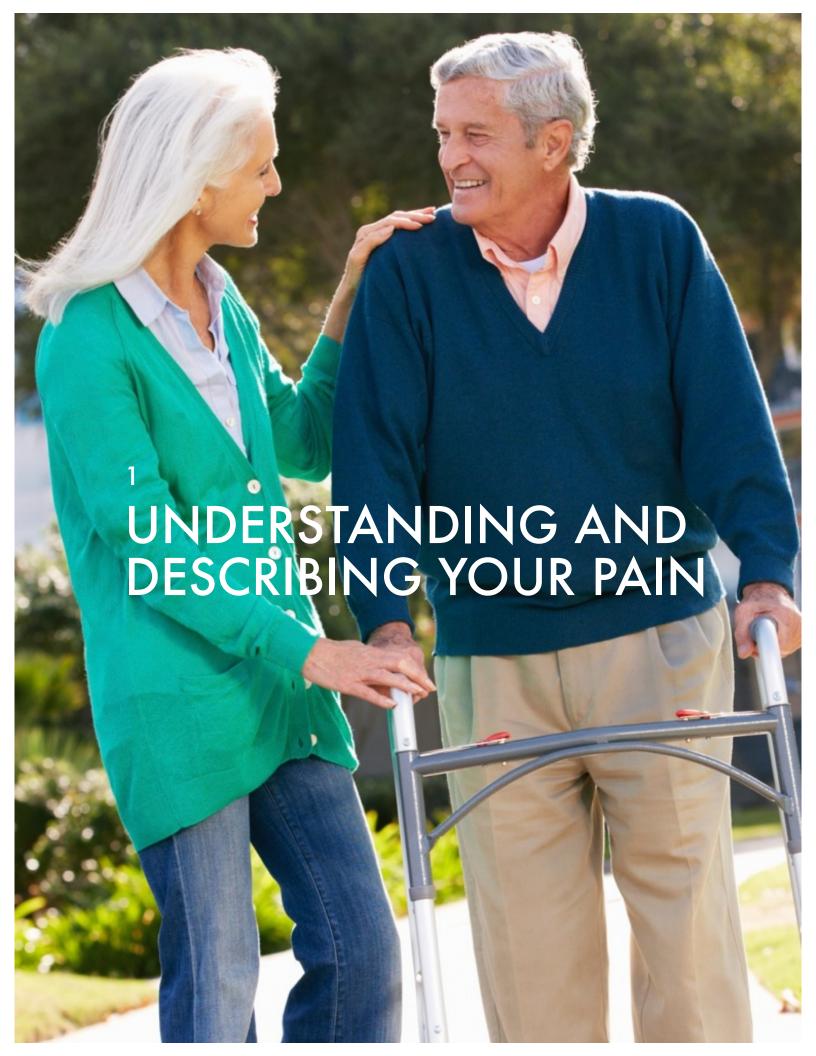
best possible decision for your care. While opioids can be a great tool in pain management, they aren't for everyone.

My Opioid Manager App, which accompanies this book, is a free smartphone app available through the iTunes Store and Google Play. The app offers the convenience of electronically filling out forms and saving them to the app. You will then have the ability to print your completed forms or e-mail them directly to your health care provider. Having these forms filled out prior to your healthcare appointment will allow for more time to discuss your questions and concerns.

For those who do not have access to a smartphone, we have included all the forms as appendices in the book. This way you can photocopy as many copies as you need and fill them out by hand. Some appendices will be useful to you both before you start opioids and again during your trial of opioids, so multiple copies will be needed.

Here's what you'll learn in this book:

- In Chapter 1 you'll learn to understand pain, including how pain can affect your emotions.
- In Chapter 2 we'll describe the different types of opioids, why they might be an option for you, and describe their potential side effects.
- Finally, in Chapter 3, we'll describe how to safely and appropriately use opioids to manage your pain so that you can return to physical activity.



### CAUSES AND TYPES OF PAIN



There are two major kinds of pain: nociceptive pain and **neuropathic pain**.

You may experience either nociceptive and neuropathic pain, or only one type. By understanding how your pain occurs you will be better able to make wise choices about managing your pain.



Nociceptive pain

Pain caused by damage (or a potentially damaging force) to any other tissue in the body is called normal or **nociceptive pain**. This type of pain may occur if you stress or injure your muscles, tendons, joints, bones, or organs. Nociceptive pain can also be caused by surgery, or a disease such as cancer. Words often used to describe nociceptive pain include sharp, aching, throbbing, etc...

The most common types of **nociceptive pain** are:

- Sprains
- Strains
- Fractures
- Burns
- Inflammation
- Degenerative diseases

Pain caused by damage to the **nervous system** - is called neuropathic or "nerve" pain (for example, carpal tunnel syndrome).



Neuropathic pain

This can become long-term **chronic pain**, and it can be challenging to manage. Words often used to describe nerve pain include burning, pins and needles, tingling, etc.

The most common types of **neuropathic pain** are:

- Pain caused by nerve injury at the time of an accident or surgery
- Compression of nerves (e.g., carpal tunnel syndrome)
- Painful diabetic neuropathy
- Post-herpetic neuralgia (pain occurring following shingles)
- Pain post stroke or post spinal cord injury
- Complex regional pain syndrome

There are some types of pain that are mixed neuropathic and nociceptive, such as back pain. Other types of pain have a cause that is not yet fully understood, such as fibromyalgia.

#### Baseline pain versus breakthrough pain

Patients with **chronic pain** usually say that their pain changes during the day. It is important to document the intensity of the peak pain (or **breakthrough pain**) versus the intensity of the **baseline pain** that is constant. Baseline pain is the pain that is always there, while breakthrough pain is the more intense pain that comes and goes. Your healthcare provider may ask you what is the least intense pain during the day (for example, on a scale from zero to ten), what is the most intense pain, what is the average pain, and what makes the pain get better or worse.



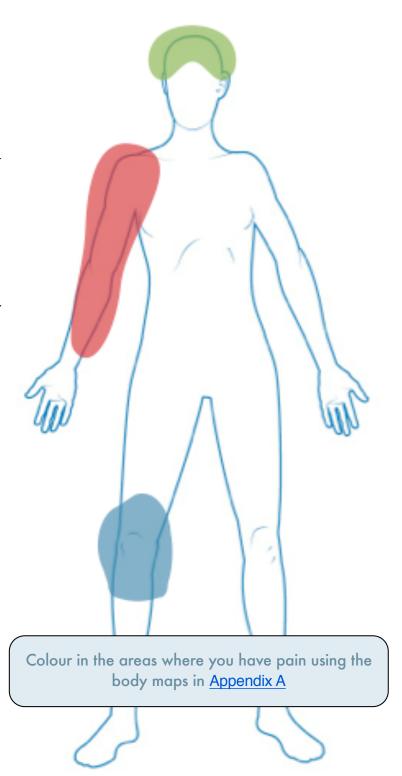
#### MY PAIN DIARY

Part of treating chronic pain is to first understand it and map it out. It can be difficult to focus on your pain but the more we understand it, the better we can treat it. We've created a body diagram with a table to fill out to help get you started. Not everyone's pain is so easily mapped out so do your best. Depending on the complexity of your pain, your healthcare provider may ask you to start journaling but this diary is a great first step.

To start, get yourself some coloured pens, pencils, or crayons in various colours. Then, start to think about the different pains you suffer from and pick the pain that bothers you the most. Choose a colour and draw in on a copy of the body picture (Appendix A) where your pain is located. In our example, we used red. Then, use the table to help you describe that pain.

The body diagrams and table were developed by Dr. Andrea Furlan & Ms. Amy Robidas, Toronto Rehabilitation Institute, University Health Network, 2015.

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We've provided the following guidelines to help you:

- Location: What parts of your body hurt?
- Intensity: On a scale of 0-10 with 0 being no pain and 10 being the worst pain you can imagine, rate the intensity of your pain. This is your own rating that will help your healthcare provider track your progress over time. These numbers are not used to compare you to other people.
- Timing: Is the pain always there (constant) or does it come and go? Are there certain times of the day when the pain gets worse?
- Description: Choose words that you would use to describe your pain. You can use words like:

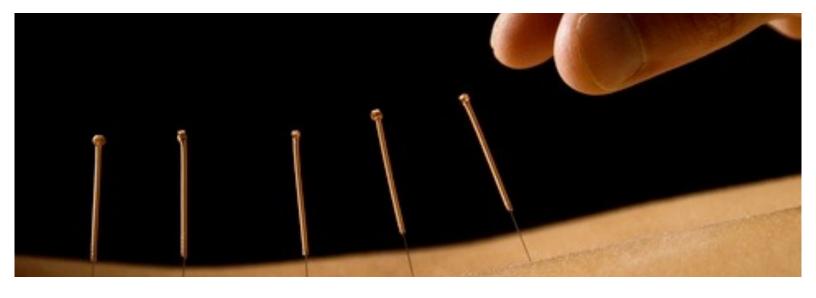
Aching	lcy coldness	Tearing
Burning	Numb	Tenderness
Crawling	Pressure	Throbbing
Crushing	Sharp	Tightness
Electrical	Shooting	Tingling
Heaviness	Stabbing	Other:

- Duration: How long ago did this pain start?
- Aggravating: What makes this pain worse? e.g., exercise, bad weather, sitting too long, etc.
- Relieving: What makes this pain better? e.g., ice/heat, rest, medication, etc.

Once you have finished this process for your worse pain, start over with a new color and fill in the 2nd worse pain you have. We've used green in our example to describe pain associated with headaches. Repeat this over and over until you have mapped out all the pain in your body.

\* 0 is no pain and 10 is the worst pain that you can imagine. Remember, this is a scale to compare you with yourself. Each person is different, so it is not to compare you with another person. An intensity rating of 10 for you may be different to what is 10 for another person.

Color used on body	Location of pain	Usual Intensity (0-10)*	Timing	Description	Duration	Aggravating	Relieving
Red	Right arm & shoulder	8/10	Constant	Aching, pins & needles	2 years	Certain movements	Rest, medication
Green	Headaches	6/10	Comes & goes	Throbbing	10 years	Stress	Relaxation
Blue	Right knee	5/10	Comes & goes, worse first thing in the morning	Aching, shooting	1 year	Walking too much, bending, bad weather	Rest, medication, ice



### TREATMENTS YOU HAVE TRIED

Your healthcare provider will be interested to know all treatments that you have tried for your pain in the past. Your healthcare provider needs this information because knowing how things worked (or didn't) in the past will help know what to try next.

First, in <u>Appendix B</u>, list all previous medications you have tried before for pain. Estimate dates if you aren't sure of them.

Medication name	Maximum dose taken (mg)	Average # times taken daily	Start date	Stop date	How did it work?	Why did you stop?
Pregabalin	75mg	1	Jan 2011	Dec 2011	Took away about 50% of my pain	Made me too drowsy
Oxycodone	10mg	4	June 2012	July 2012	No benefit	No benefit

Next fill out the additional table in <u>Appendix B</u> listing treatments, other than medication, that you have tried. Use approximate dates if you aren't certain. This can include exercise, stretching, massage, acupuncture, CBT/ACT, etc...

Treatments	Date I Started	Date I Stopped	Results	
Massage therapy	Aug 2010	May 2011	Worked well on muscle pain, but the effects only	
			lasted a few hours.	
Acupuncture	Nov 2010	Nov 2010	I was too scared of the	
Acupuncture	1100 2010	1100 2010	needles so it didn't work.	
			Helps with about 25% of	
Physical therapy	Physical therapy Jan 2013 Current		y Jan 2013 Current	my arm pain. No effect on
			my headaches.	



### PAIN AND DAILY ACTIVITIES

Your healthcare professional will be interested to know how much pain usually affects your daily activities. Knowing your functional level before starting treatment can help show your progress in more ways than just with a pain score. This means that you will be asked to fill out this form over and over throughout your course of your opioid trial.

Use the tool in <u>Appendix C</u> to describe your level of function over the last week; for example:

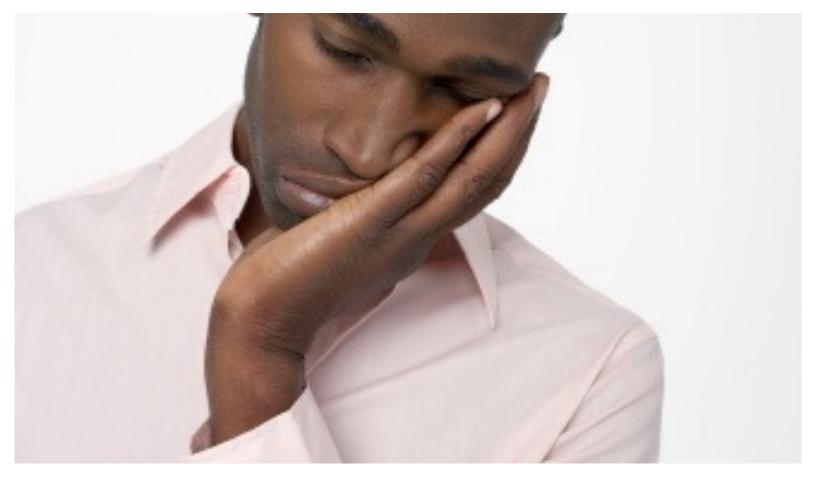
#### General activity

0 1 2 3 4 5 6 7 8 9 10

Select one number from 0 to 10 that describes how pain usually affects your activity, with 0 being no interference and 10 being complete interference.

Please note: This is a subjective scale used to compare you to yourself over time. It is not used to compare you to others.

This tool is adapted from the Brief Pain Inventory, with permission from Dr. Charles Cleeland, Pain Research Group.



# PAIN AND EMOTIONS

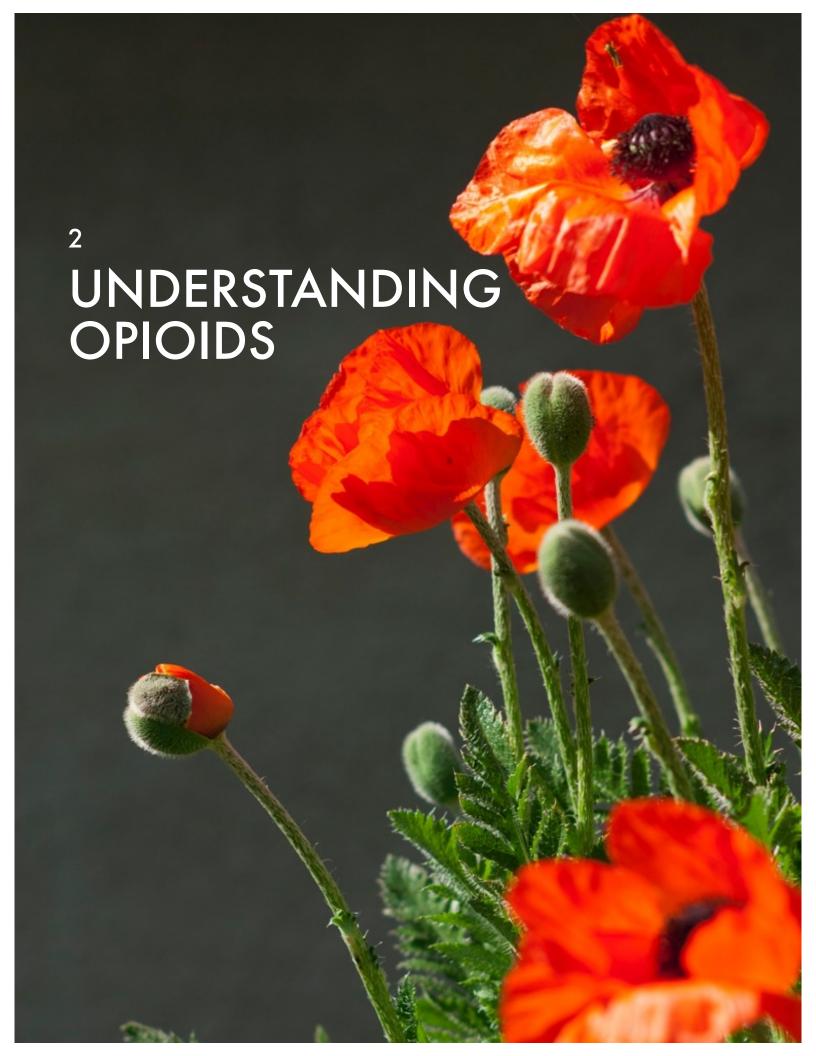
Chronic (continuing) pain affects emotions and emotions can affect chronic pain. Living in pain can cause sadness, frustration, anxiety, depression, or anger. This is not only because people don't like to suffer, but also because chronic pain makes changes in the brain that affect mood and emotions. After a while, negative emotions and chronic pain become so closely linked in the brain that you can't effectively treat one without treating the other.

Somatization happens when our bodies create a physical symptom as a way of dealing with a negative emotions. In other words, your body does not feel well because of what's happening in your mind. Common examples of this include getting a headache as a result of stress, getting a stomach ache when feeling guilty, or getting hives when feeling nervous. What most people don't realize is that the list of possible physical symptoms that can be created by the brain is so long that it could easily fill several books. Somatization is not the same as 'making up' pain but rather proof of the mind-body connection.

Since pain and emotions are so closely connected, your health care provider will want to assess your emotional status. Filling in the Patient Health Questionnaire (PHQ-9) in <u>Appendix D</u> will help start that process.

			than half	-
	all	days	the days	day
Little interest or pleasure in doing things	Fill in t	he table	in <u>Append</u>	ix D

This PHQ-9 tool was developed by Drs Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues, with an educational grant from Pfizer Inc.





# OPIOIDS: USES AND TYPES

Your healthcare professional may offer opioids to help manage your **chronic pain**.

Opioids are medications derived from opium or synthesized in laboratories. They are the most potent **analgesics** (pain relievers) available today. There are many different types of opioids available, for example, codeine, oxycodone, morphine, hydromorphone, fentanyl, etc.

#### Opioids vs narcotics

Narcotic is a broader category of drugs that includes prescription opioids, but also includes some street drugs like heroin and cocaine. All opioids are narcotics but not all narcotics are opioids.

#### Uses of opioids

Opioids are used to reduce your pain so you can improve your ability to be active. You and your doctor will set goals and ensure the medication is effective in achieving these goals, e.g. improving your ability to do the things you did before pain prevented you. If you seem to be benefiting from the pain medication, your doctor will see you for follow-up visits to assess pain relief, address any adverse effects, and review your progress towards meeting your goals.

Opioids don't cure chronic pain; the goal is to manage the pain enough to be able to take part in the activities that improve pain and life. Many patients discover that once they are able to exercise regularly, their pain becomes more manageable. This reduces the need for opioid pain medication.



#### Types of opioids

There are many different types of opioids available on the market - they come in various strengths and forms.

Both weak and strong opioids are available. **Weak opioids** include codeine, hydrocodone and tramadol. The strength of these medications is limited because in higher doses they create too many adverse effects. Therefore, they are used to treat mild pain.

**Strong opioids** include morphine, oxycodone, hydromorphone, fentanyl, methadone, buprenorphine, tapentadol and oxymorphone. These medications are usually used to treat moderate to severe pain.

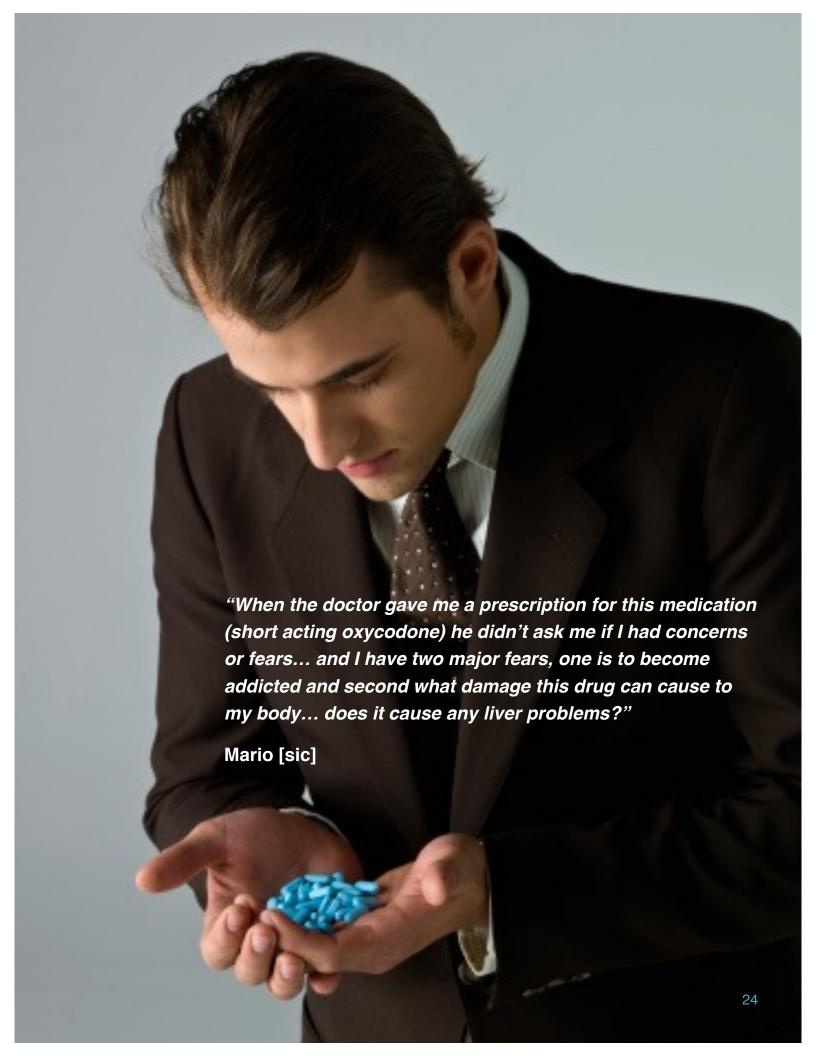
Opioid medications also come in long-acting and short-acting forms. **Short-acting opioids** are those that start working in your body very fast (usually in 20 or 30 minutes), but they also wear off faster (between 3 and 4 hours). On the other hand, **long-acting opioids** take longer to work in your body, but they also last longer (8, 12 or 24 hours). For **chronic pain**, long-acting forms are safest and most effective. Your doctor may give you a short-acting form to take occasionally for **breakthrough pain**.

Pain patches are another way of using opioids. Patches release a steady stream of medication to the body, through the skin. Patches are worn continuously and only need to be changed every 3-7 days, depending on what patch is used. Try writing the date of application on the patch so you don't forget when to change it.

#### Routes of entry

The way you take your opioid medication can also be controlled. Opioids can be taken by many different routes:

- Oral (tablets, capsules or liquid to be swallowed)
- Sublingual (dissolves under the tongue)
- Buccal (dissolves in the mouth)
- Transdermal (absorbs through the skin)
- Topical creams (to apply on the skin)
- Suppositories (to be inserted into the anus or vagina), or
- Injections





### OPIOID SIDE EFFECTS AND RISKS

Opioids, like any medication, can have risks. In the case of opioids the risks include the following:

- Adverse events, such as sleepiness and constipation
- Medical complications, such as sleep apnea, lowered sex hormones and and pain caused by the opioid (opioid induced hyperalgesia)
- Misuse and abuse, which may lead to addiction
- Overdose, which may lead to death

The good news is that these risks can be assessed and managed by working cooperatively with your doctor to come up with a plan that is safe for you. Your doctor can properly assess your risk but only if you are honest in your responses. Misleading

your doctor can have serious consequences to your health such as **overdose** and death.

#### Adverse events

Any medication you take can have **adverse events** (or side effects). Opioids are associated with side effects, the most common being:

- Nausea (28% of patients report it),
- Constipation (26%),
- Drowsiness (24%),
- Dizziness (18%),
- Dry-skin/itching (15%), and
- Vomiting (15%).

The key is to find a balance between the benefits of the medication and the side effects the medication causes. Ideally, the pros should outweigh the cons.

Users of opioids find that these side effects can be minimized by slowly increasing the dose of the drug to the right level, using anti-nausea drugs, or by taking stool softeners and/or bowel stimulants. Sometimes the type of opioid needs to be changed, or the dose and timing need to be modified.

It's important to realize that doubling your dose does not double the pain relief. Doubling the dose may however double the side effects. Patients and their **prescribers** need to work as a team to find the right fit.

You can find the right balance by beginning with an *opioid trial*. (You'll learn more about opioid trials in the next chapter.)

#### Medical complications

Occasionally, more serious medical complications may result from high opioid use. Those most often observed are:

- **Sleep apnea**, which may lead to poor sleep quality or even a major cardiovascular event such as heart attack or stroke
- Low sex hormones (also known as hypogonadism), which may reduce sex drive, sexual performance or your ability to conceive
- Opioid induced hyperalgesia, a different kind of pain than the one for which the opioid was prescribed. This new pain is caused by the opioid medication

We'll expand upon these complications in Chapter 3.

#### Misuse and abuse

Sometimes complications occur from not taking opioids properly. To avoid **misuse**, only one doctor should be prescribing opioid medication for you – don't get this medication from any other doctor unless both are aware that you have two prescriptions for opioids. Furthermore, don't take opioids from someone else or share your medication with others.

If you don't take the opioid medication properly it may lead to **addiction** - this means that you're using the drug for reasons other than pain control (e.g. "get high", relaxation, sleep aid, etc.). Most patients do not "get high" from taking opioids and addiction is unlikely if your predicted risk for addictionis low. Those at greatest risk for opioid addiction have a history of addiction to alcohol or other drugs.

To assess your risk of opioid **addiction** your doctor will ask you questions and discuss any concerns you have about the possibility of developing an addiction. Some of the questions the doctor may ask are found in the Modified Opioid Risk Tool in <u>Appendix E</u>.

Work through the questions in this tool prior to meeting with your healthcare provider. Select "yes" for all risks that apply to you. It is very important to be truthful in your answers to properly determine your risk of **addiction**. Most opioid addicts say that addiction is harder to deal with than the original pain.

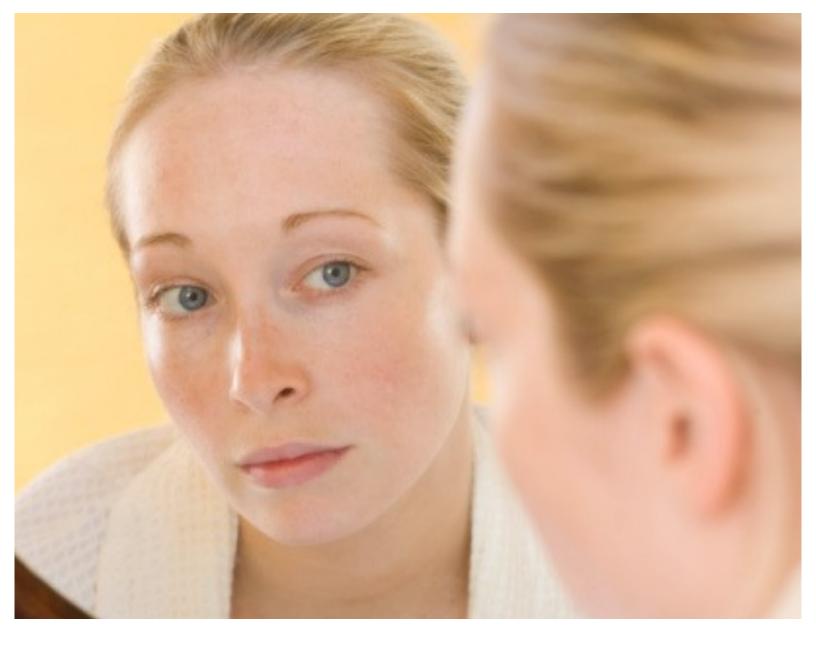
Questions	Yes	No		
Do you have a family history of substance abuse?				
Alcohol	vers on the table in	Appendix E		
Illegal drugs	l	Appendix L		

(This tool is adapted from the Opioid Risk Tool with permission from Dr. Lynn R. Webster.)

#### What do the results mean?

Each "yes" answer shows an increased risk of misusing opioids and getting addicted to them. Your **prescriber** (doctor/nurse practicioner) may suggest alternatives to opioids for pain management. Most people who develop an opioid **addiction** had risk factors before they started the medication.

**Addiction** is different than physical dependence. Physical dependence means that your body needs the medication or else it will go into **withdrawal**. Dependence is often seen with substances like caffeine where a person who has caffeine regularly may get headaches, constipation, insomnia, or a number of problems if they suddenly stop having caffeine. Addiction on the other hand is a neurobiological condition where a person is unable to control their medication use. They develop cravings or compulsions to take the medication and cannot stop taking the medication, even when it is harming them. Physical dependence is common and it can be managed by slowly reducing the dose of opioid, while addiction is not easily treated because it is a very complex issue.



#### Overdose

When taken as prescribed, opioid **overdoses** are uncommon. In the United States, seniors overdose on blood thinners, acetaminophen, and diabetes medication far more often than opioids. Unfortunately, opioids remain the highest cause of deaths related to overdose, especially when combined with other street drugs, alcohol, anxiety medication or sleeping pills.

You can avoid an **overdose** by taking the opioid as prescribed and by being honest with your health care provider about your risk factors.

You may be at a greater risk for **overdose** if:

• You use substances like alcohol, street drugs, and sleeping pills (benzodiazepines or barbiturates) that depress activity of the central **nervous system** (CNS) in the brain

Opioids also act on the CNS to control breathing and thinking, so combining opioids with these other drugs may further depress brain activity and may cause an **overdose**.

Tell your **prescriber** about any other drugs you are taking, whether they are prescription, over the counter, or street drugs. Never start a new medication (including herbal medicines) while you are on opioids without first speaking with your doctor or pharmacist. **Overdose** is most common in people taking several types of medications at once. This is why it is so important to be honest with your healthcare provider about what else you are taking.

You have decreased function of your liver and kidneys

Opioids are eliminated from the body through these organs. People who have decreased function of the liver and kidneys will accumulate opioids in their body more rapidly. Even a small dose of opioid will remain in their body for a prolonged period, leading to **overdose** with additional doses.

• You have a sleep disease (e.g., **sleep apnea**) or sleep problem (insomnia)

People with sleep disorders have a higher risk of having breathing problems, and opioids may worsen these symptoms.

You have dementia or cognitive impairment

People with these conditions tend to forget that they've taken a dose of medication, and take a second dose as a result. Taking a double dose of opioid is dangerous as the body is not tolerant to it. This risk can be minimized by using medication dosettes or medication calendars to track when the medication is taken.

Taking more medication than prescribed puts you at risk for **overdose** but so does skipping doses. When you skip more than 3 days of your medication, your body loses some of the **tolerance** it has built up to the drug. This means your body will no longer be able to handle your usual full dose of medication as it did when you took it regularly. If you had to stop the opioid for 3 or more days, for whatever reason, speak with your **prescriber** before starting the medication again. You may need a dose change.

#### You are elderly

Older people are at a higher risk of opioid **overdose** because many diseases are more common with aging. Conditions such as chronic obstructive pulmonary disease (COPD), sleep problems, kidney disease, liver disease and heart disease can change the way that the body can tolerate opioids. Many elderly patients cannot break down the opioids as quickly anymore so they must take smaller doses to be safe. Also, older patients tend to take a higher number of different medications at once. Taking more than three medications at once increases the risk of drug interactions, medication mix-ups, and increases the chance of having side effects.

#### **Opioids and Alcohol**

While the combination of opioids and alcohol can increase your risk of overdose, not all alcohol consumption is the same. A person who has a glass a wine per week is at much lower risk than the person who has several drinks everyday. Below is Canada's Low-Risk Alcohol Drinking Guidelines. These guidelines are the amount of alcoholic drinks people can have without a big increase in the risk of overdose.

Women: 10 drinks a week, with no more than 2 drinks a day most days.

Men: 15 drinks a week, with no more than 3 drinks a day most days.

For these guidelines, "a drink" means

- •341 ml (12 oz.) bottle of 5% alcohol beer, cider or cooler
- •142 ml (5 oz.) glass of 12% alcohol wine
- •43 ml (1.5 oz.) serving of 40% distilled

Source: www.camh.ca

To check how many risk factors for opioid **overdose** you have, use the Overdose Assessment in **Appendix F**. Circle Yes for all those that apply, and then add up the number of Yes answers to get your total. The higher your total, the more you are putting yourself at risk of overdose.

Questions		No	Yes
Are you older than 60 years of age?		0	4
Do you take sleeping pills (benzodiazepines)?	Fill in your answers using	the tool in	Appendix F
Do you drink alcohol?		U	ļ ļ

The Overdose Assessment was developed by Dr. Andrea Furlan & Ms. Amy Robidas, Toronto Rehabilitation Institute, University Health Network, 2015, based on the Canadian Guideline for Safe and Effective Use of Opioids.



In general, opioids are safer than anti-inflammatories over the long term. If the dose of opioid is kept low there is no damage to organs like the liver, kidneys or heart. BUT opioids can be dangerous when starting or increasing a dose, or when combining them with other substances such as alcohol or sedating drugs such as pills to help anxiety or sleeping.

Opioid drug **overdoses** are serious, and are often life-threatening, but they are preventable. You can reduce your chances of dying by knowing the symptoms of an opioid overdose and by teaching your friends or family how to recognize it:

- Nausea/vomiting
- Awake, but unable to talk
- Face is very pale or clammy
- Making "gurgling" or choking sounds while sleeping
- Lips and fingernails turning blue or purplish
- Cannot be woken up by calling their name or shaking them
- Difficult, slow, erratic, or shallow breathing
- Breathing has stopped
- Heartbeat is slow, erratic, or not there at all

If you suspect that you or someone you know is having an **overdose**, call 911 immediately.





## STARTING OPIOIDS

Deciding when to start an opioid trial depends on many factors, including what you've tried in the past. When managing pain, you don't want to make too many changes at once - you wouldn't know what treatment worked and what didn't. Your health care provider may also choose other alternatives to treat pain before selecting opioids. If you have another condition that is affecting your pain, that condition may need to be managed before trying opioids (e.g anxiety or depression).

After discussing your options and the potential risks with your doctor, you may choose to use opioids to manage your pain so that you can be physically active.

There are many different types of opioids available on the market. To make it more complicated, there are also a number of different combinations of medications available to treat pain.

If you've never used opioids to help with your **chronic pain**, the best plan is to start with an **opioid trial** - beginning with a low dose, gradually increasing the dose, and watching carefully for side effects. Let's learn more about how this opioid trial will work.

#### A trial of opioids

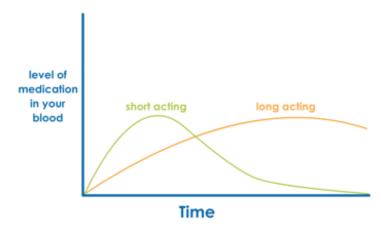
When starting opioids your doctor will likely suggest a limited time trial. He/she will typically start you on a weak opioid because it has fewer adverse effects. You may remember from Chapter 2 that **weak opioids** are less potent than **strong opioids** and are used to manage mild pain. Medications classified as **weak opioids** include codeine, hydrocodone and tramadol. Over time, your doctor will increase the dose of opioid or may move you onto stronger opioids.

Your doctor may also prescribe a combination of the opioid with other drugs. As previously mentioned, some opioids are available in combination with other drugs. A common combination prescribed to patients is an opioid mixed with acetaminophen (Tylenol®) or acetylsalicylic acid (Aspirin®). The advantage is that the opioid and acetaminophen (or acetylsalicylic acid) work differently to treat pain. When combined, the two medications play off each other which results in pain relief that is greater than the sum of the individual medications. As a result, you need lower doses of both medications when taken together. The combined tablets are also useful to prevent abuse of these medications because you would **overdose** on the

acetaminophen or acetylsalicylic acid long before overdosing on the opioid.

Finally, your **opioid trial** may include a mix of short acting and long acting medication. The long acting opioid is usually intended to be used at scheduled times with the goal of maintaining a steady dose in your blood stream. The short acting opioid is used to manage episodes of **breakthrough pain** that may occur when you do physical activity that results in pain above your normal levels. The **short-acting** opioid is usually prescribed "as needed" or "prn" in medical jargon. To get the

benefits of the opioid combination, you should use the medication as prescribed by your doctor.



This figure shows how short- and long-acting medications will behave in your blood over time.

#### Calculating your daily dose

It's important that your doctor starts you off on a low dose of opioids and gradually increase your dose. As not all opioids are the same, a team of healthcare experts created a calculator to help your doctor find the right dose. You can do the calculations yourself using the following method or ask your prescriber/pharmacist to do the math for you.

The following table is how your doctor will calculate if you are on a low or high dose of opioids. The table is also useful when trying to change opioids because it compares opioids by using MEQs (morphine equivalents).

Opioid	To convert to MEQ,			
Marabina	multiply by:			
Morphine				
Codeine	0.	15		
Oxycodone	1.	.5		
Hydromorphone	Ę	5		
Meperidine	0.	.1		
Methadone & Tramadol	Unreliable calculation			
	Patch dose	MEQ range (mg/day)		
	25 mcg/h	60 - 134		
	37 mcg/h	135 - 179		
Transdermal	50 mcg/h	180 - 224		
fentanyl	62 mcg/h	225 - 269		
	75 mcg/h	270 - 314		
	87 mcg/h	315 - 359		
	100 mcg/h	360 - 404		

Morphine equivalents are a way to look at opioids so that you can compare them by using the same measurement. It's like trying to add 2 inches + 5 cm + 6 feet. Until you change everything into the same unit (e.g. all into centimeters) it is difficult to do the calculation.

Here's how the table of conversion works:

Step 1: Add up the total number of milligrams (mg) of each opioid you take during a typical day.

Step 2: Use the table to calculate how much that would be equal to if you were taking morphine, i.e., MEQs.

Here are two examples.

#### Example #1

You are taking Codeine 30 mg, 4 times a day.

$$30 \text{ mg x } 4 = 120 \text{ mg/day}$$

According to the table, codeine is multiplied by 0.15 so.

$$120 \times 0.15 = 18 MEQs$$

#### Example #2

You are taking 80 mg **long-acting** oxycodone (OxyNEO®) 2 times daily and 10 mg **short-acting** oxycodone, 4 times per day.

Long-acting: 80 mg x 2 = 160 mg/day160 mg x 1.5 (from table) = 240 MEQs

Short-acting: 10 mg x 4 = 40 mg/day40 mg x 1.5 (from table) = 60 MEQs

Total MEQs: 240 + 60 = 300 MEQs





Let's calculate your daily dose:

Show this page to your doctor or pharmacist and check if your calculation is correct.

### Am I on a low or high dose of opioids?

Usually when your total daily morphine equivalents are below 50 MEQs you are considered to be on a low dose. A moderate dose is between 50 MEQs and 200 MEQs. A high dose is above 200 MEQs, and an extremely high dose is above 1000 MEQs.

#### Is there a maximum dose?

Opioids don't usually have a ceiling or maximum dose, but the Canadian Opioid Guideline released in 2010 by the National Opioid Use Guideline Group (NOUGG) recommends that for the management of chronic non-cancer pain, doctors use a dose of 200 mg of morphine equivalent per day as a threshold to re-evaluate the need for higher doses and to monitor the patient more closely.



### Finding the right dose

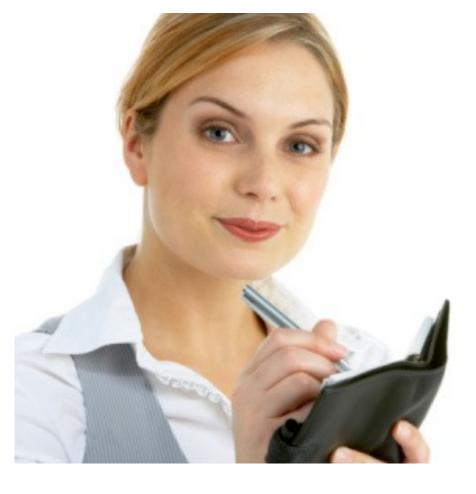
The goal of the opioid trial is to find the dose that works best for you so that you can return to physical activity.

As the trial progresses, your doctor will slowly increase the dose until he/she achieves an **optimal dose**.

The optimal dose is reached when a BALANCE of three factors has happened:

- The medication is effective you have improved function or at least a 30% reduction in the intensity of your pain
- The effectiveness stops increasing (or **plateaus**) so that raising the dose gives very little benefit
- The adverse effects or complications are manageable

It may take some time to achieve the **optimal dose**: an **opioid trial** can end within a couple of weeks but usually lasts between 8 to 12 weeks.



# TRACKING YOUR OPIOID TRIAL

During your **Opioid Trial** there are a few things that need to be monitored and documented so that you can share them with your doctor. Seven days prior to your next doctor's visit, you will need to:

- List all opioids and doses you take every day, and record how you are taking them (Appendix G);
- List all other non-opioid **analgesics** (painkillers: e.g. acetaminophen, anti-inflamatories, NSAIDs, etc.) you take every day, and how you take them (**Appendix G**);
- List all other non-analgesic medications you take every day, and how you take them (Appendix G);
- List any **adverse effects** you noticed with opioids (Appendix H);
- Using a new copy of the My Pain Diary (<u>Appendix A</u>), define the body areas where you experience pain during your **opioid trial**.
   This new diagram will be compared to the one you filled out before starting opioids;
- Record your level of function on a new copy of the Pain and Daily Activities questionnaire (<u>Appendix C</u>).

We've developed some tools (found in the appendices) to help you with your tracking. Let's get started!

Track your medications and symptoms every day for a week in advance of your appointment with your doctor.

### My Medications This Week

Using the My Medications table in <u>Appendix G</u>, you will track how much of each type of medication you are taking during one week of your opioid trial.

AA - Ji	# times taken/day*						
Medication	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Medication : Dose (mg):	Fill in yo	our inform	ation in	the table	in <u>Appen</u>	dix G	

### My Symptoms

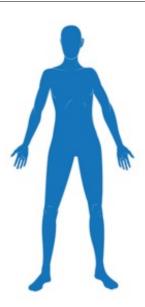
Using the Adverse Events table in <u>Appendix H</u>, track any **adverse events** (side effects) that you experienced over one week while taking opioids.

Day of the Week	Adverse Events
Sunday	Fill in your information in the table in Appendix H

### My Pain

At the same time, on a new copy of the body map images and table in <u>Appendix A</u>, record your pain symptoms. Note the areas over the past week where you felt pain and describe the pain.

At the end of the week, fill in the level of function form in <a href="Appendix C">Appendix C</a> to record how much pain interfered with your activities during the week.





# RETURNING TO PHYSICAL ACTIVITY

You're working through your **Opioid Trial** so that you can return to physical activity. Good for you!

Most people who use opioids find it helps with about 30% of their pain. What would you like to be able to do if you had 30% less pain? Which activity (or activities) did you give up in your life because of pain? Would you like to be able to return to those activities? What makes you laugh? Would you like to add more fun in your life?

When people have **chronic pain**, they often want to decrease their activity levels in order to manage their pain. This is very unfortunate because people often become weaker and lose endurance as a result of not moving as much. This weakness and loss of endurance can create or spread myofacial pain. Myofacial pain is pain from muscles or the muscle lining (fascia). The result is an increase in overall pain levels.

Physical activity is important to treat muscle pain and also benefits your brain. As mentioned in a previous chapter, **chronic pain** makes negative changes in your brain. Exercise helps to re-train your brain to reverse those changes.

It can be hard to get back into activity when you have been sedentary for a while. To help you, the next section explains how to set some goals and achieve them.

### **Setting SMART goals**

Goals are very individual and need to be set based on your unique situation and needs. Goals should be something you want to accomplish, not simply "help my pain". Goals help us not only to keep track of where you started and how much you've accomplished but also help to put a plan of action together based on what's valuable to you.

For goals to be worthwhile, they should be written in a SMART format. SMART goals are:

S – Specific: What, when, and how that clearly defines the goal.

M – Measurable: How is success evaluated?

A – Achievable: The goal is challenging but possible to accomplish.

R – Relevant: The goal is worth achieving for me.

T - Timely: The goal is time limited. There is a defined end.

Here are some examples of SMART goals.

	Poor	SMART		
Specific – vague goals give vague results	I will exercise	"I will exercise three times a week by walking around my block twice at a brisk pace"		
Measurable – if you cannot measure the goal you can't tell whether you've met your goal or how you are progressing	"I want to lose weight"	"I want to have lost a minimum of 15 pounds at the end of 4 months"		
Attainable/achievable – goals should stretch you, but be realistic	"I want to work"	"I want to be back working full- time in one year by attending rehabilitation therapy and working with human resources to take part in the accommodated work program'		
Relevant – goals should be important to you and have purpose in your life	"By the end of the year, I will learn how to fly a plane"	"By the end of the year, I will earn enough money through waitressing to finish my final two courses to earn my bachelors degree"		
Timely – goals need to have deadlines or they lose relevance and focus.	"I will finish my research paper"	"I will start my research paper by 1 PM today and finish the first draft by noon tomorrow"		

# Creating a plan of action

Set yourself 2 to 3 goals to discuss with your healthcare provider. Once goals are set, you will come up with a plan on how to achieve these goals.

People in **chronic pain** can find it very difficult and painful to return to physical activity. This is best done in a controlled manner that takes "baby-steps" over a period of time. When you first start to resume activity, your tolerance to the activity may be greatly reduced. Too much activity is bad because it can cause a flare-up of your pain; your body isn't used to that activity level anymore and cannot handle it. On the other end, too little activity won't be enough to gain any benefits from the exercise. You must aim for the middle road of intensity.

# Would you like to add more fun in your life?

Once your body gets use to a level of activity, you can increase the intensity by about 5% to 10%. This way you will continue to challenge yourself while building physical fitness. Continue making the activity harder until you reach your target goal.

Here is an example of how to build up your physical activity over time in a walking program:

- Week 1: Walk 3 minutes (3 times per week)
- Week 2: Walk 3 minutes & up and down 2 steps (3 times per week)
- Week 3: Walk 4 minutes & up and down 2 steps (3 times per week)
- Week 4: Walk 4 minutes & up and down 4 steps (3 times per week)
- Week 5: Walk 5 minutes & up and down 4 steps (3 times per week)

•••

• Week 30: Walk 30 minutes & up and down 30 steps (Goal)

This plan isn't final. You can adjust it as you go. For example, if at week 3 you feel that the activity is too hard, you can change the plan to take smaller steps. If on the other hand, you find it too easy; change the plan to have bigger steps.

If a walking program doesn't inspire you, try other slow and rhythmic activities like swimming or tai chi.

The success of your **opioid trial** will in part be determined by how well you are progressing on your goals. If your goal includes walking more

and opioids make you too tired to get up, the trial didn't work and something needs to be changed before you try it again.

Don't worry if the first thing you try doesn't work. Finding the right opioid and dose can be a trial and error process. Sometimes the goal and plan of action need to be changed and sometimes the treatment needs changing. Work with your healthcare provider to find the right fit for you.

"I thought opioids were the only answer to my pain. I now realize they don't work alone. I have to put effort into my recovery by being more active. Opioids help control my pain enough to get me moving again."

## Don





# TIPS ON USING OPIOIDS

### How do I store opioids at home?

Opioids are potent pain relieving medications that are tightly regulated by law enforcement. **Prescribers** and users must abide by strict rules and regulations because of their potential for harm. If you are storing opioid medication in the home, please do so in a thoughtful manner. Here are some tips to help keep your medication safe.

- Don't advertise. While it's important for certain people to know what medications you are taking, be careful who you tell about your opioids. Prevent theft of your medication by limiting the information to the people you trust the most.
- Store wisely. Pick a place to keep your medication safe. A locked cabinet or drawer is ideal. If no locked storage is available, store the medication in an area of the house that is secure or hidden. Avoid rooms of the house where visitors may travel (e.g., bathroom, kitchen).
- Know your medication. Keep track of how much medication you have left in the bottle. If medication goes missing, you may want to investigate or file a police report.

### What should I do if I lose the prescription or the pills?

At each appointment your doctor will give you a prescription for the amount of medication that will last until your next appointment – keep your prescription safe and use the medications as instructed – if you run out too soon or lose your prescription your doctor will not likely provide another.

If you cannot follow these precautions it may not be safe for your doctor to prescribe opioid medication for you.

Withdrawal symptoms do not mean you are addicted – just that you stopped the drug too quickly – your doctor will direct you on how to slowly stop this medication so that you won't have this experience.

### What happens if I stop taking opioids abruptly?

When stopping opioids suddenly, you may experience a **withdrawal** reaction. Opioid withdrawal symptoms are flu-like, e.g. nausea, diarrhea and chills. Withdrawal from opioids is not life-threatening but it can be very uncomfortable. Pregnant women who go through withdrawal are at risk for miscarriage or premature labour.

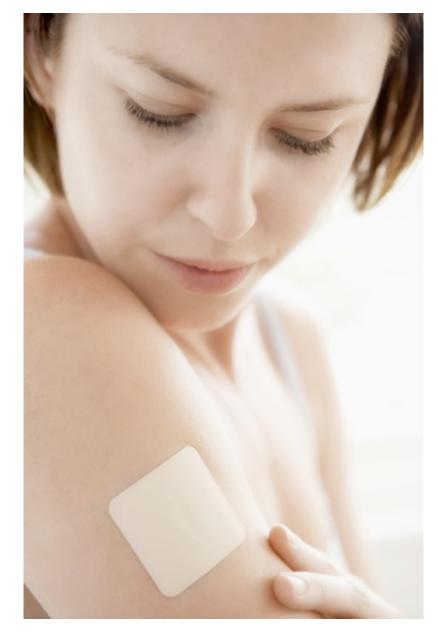
If you interrupt your medication schedule for 3 days or more, for any reason, do not resume taking your opioids without first consulting your **prescriber** because your body might have lost **tolerance** and you may experience an **overdose**.

## Can I drive or operate heavy machinery while taking opioids?

Do not drive or operate heavy machinery while your dose is being increased or if the medication is making you feel sleepy or confused.

## Why is my healthcare professional asking me for a urine sample?

You may be asked for a urine sample before you start taking opioids or while you are being treated with opioids. This will help to show all the drugs you are taking and ensure that a combination of drugs is not placing you at risk, such as opioid and sleeping pills (benzodiazepines). The urine test will also show if there is any non-prescription opioid (heroin) or illicit drugs (marijuana, cocaine, etc.) in your body.



My doctor has prescribed an opioid patch, but I'm having trouble getting it to stay on. Do you have any tips?

Pain patches can be a great way to control your pain but patients often find it difficult to keep patches in place until they are due to be changed. Here are some tips to help keep patches in place.

- Select the application site carefully: Choose an area of the body where there is smooth, flat skin that is free of hair. This area should not be too close to a joint or in an area that is oily or sweats a lot. Rotate the site of application during patch changes.
- Prepare the skin: Rinse with regular water. Dry thoroughly.
- Handling the patch: Don't touch the sticky backing of the patch.
- Apply: Apply the patch and press down firmly for 30 seconds.
- Maintenance: Keeping the patch dry will often make it last longer.
- Repair: Prep skin and reapply the patch. Keep it in place using medical tape, or Tegaderm™.

### How do I properly dispose of unused opioid medication (including patches)?

You may need to dispose of medication if:

The medication expires

Opioids, like any other medications, have an expiry date. Do not use opioids past their expiration date.

• The medication needs to be changed

For example, you will need to change an opioid patch every 3 to 7 days, depending on the type. The patch is changed because it can no longer deliver the medication at the advertised rate (e.g., 2 mcg/h), not because it is out of medication. The old patch may still contain a significant amount of medication that needs to be disposed of carefully.

If you have medication that needs to be thrown away, please return it to your pharmacy or medication disposal collection site for proper disposal. Pain patches are often packaged with a disposal sheet. This sheet allows you to stick used patches to it once they have been removed. You can bring this sheet of used patches back to your pharmacist for disposal. Find out your pharmacy's disposal policy as some cities are enacting bylaws that force users of pain patches to return the used patches before new ones will be given.

If you are unable to return unused medication to the pharmacy, it can be put in the regular garbage if prepared properly. For disposal of pills or tablets, add water to the bottle of left-over medication to dissolve any remaining tablets. Once dissolved, add an inedible substance to it (e.g., detergent, used coffee grounds, conditioner, etc...). This will deter any would-be garbage thieves from taking the medication. Ensure that you have removed all your personal information from the bottle before putting it in the garbage.

#### Remember:

**DO NOT put the opioid directly into the trash** as it may be found by other people. While your body will get used to the dose of opioids that your doctor sets for you, this same dose can be very dangerous to others. Someone who is not used to the medication could have a serious reaction, including **overdose** and death.

**DO NOT give your medications to anyone else** – it is illegal in most places and could harm them.

We recommend that you **DO NOT flush medication down the toilet** as it ends up in our water supply.



# CONTINUING ON OPIOIDS

Once the **optimal dose** is achieved in the **Opioid Trial**, it is time to decide whether you should continue on this medication for a longer period of time. It is possible to continue pain management with opioids as long as:

The improvement you achieved in your function is maintained

You do not develop unmanageable **adverse effects** or complications

You do not develop **aberrant drug-related behaviors** (described later on in this section)

# Possible complications of opioids

As described in Chapter 2, opioids can cause complications in other organs of your body. Three of the most serious complications are:

- Sleep apnea,
- Opioid induced hyperalgesia, and
- Hypogonadism.

Newer research also suggests that opioids may also cause impairment of the immune system, birth defects and gastro-esophageal reflux (heartburn).

Your doctor will monitor you carefully for signs and symptoms associated with these complications. If you develop one of these complications you may need to switch opioids or stop opioids altogether.

Let's learn more about each of the three major adverse effects.



### Sleep Apnea

ZZ~zz..!

There are two types of **sleep apnea**:

- Central sleep apnea, and
- Obstructive sleep apnea (OSA).

Central **sleep apnea** occurs when the brain temporarily stops telling the body to inhale. Your breathing stops over and over during sleep. In obstructive sleep apnea (OSA), you continue to try to inhale but structures in your throat block your airway. Obstructive sleep apnea can cause snoring or choking noises while you sleep that are usually noticed by others. With OSA, you may be very sleepy during the day and not know why.

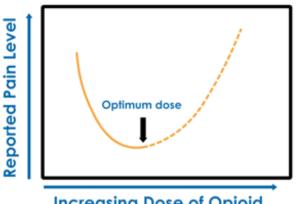
Opioids may cause central sleep apnea or worsen the symptoms of OSA in people who already have it. It is well known that sleep apnea can increase the chance of developing cardiovascular diseases such as **myocardial infarction** (heart attack) or stroke. So it is important to inform your doctor if you have sleep apnea and to report any new signs of sleep apnea you see while taking opioids.

For more information on sleep apnea visit www.lung.ca.

Opioid induced **hyperalgesia** (OIH) is a "pain syndrome" caused by opioids. Pain caused by opioid induced hyperalgesia can be different in its quality, location and distribution pattern from the pain you already had before taking the opioid. Its main feature is increased sensitivity in a concentrated area or in a more spread-out area. If you have OIH your pain gets worse and worse instead of getting better after the dose of opioid is increased (as shown in the figure below). If your doctor suspects that you are developing OIH he/she will lower the dose to your symptoms get better.

## Opioid induced hyperalgesia





**Increasing Dose of Opioid** 

## Hypogonadism



If you use opioids for an extended period of time, particularly in high doses, there is a risk that your gonads (sex organs) may fail to function normally. In women, this can mean a change in the timing of their menstrual cycle or flow (period). A woman may also have difficulty conceiving (becoming pregnant) or maintaining a pregnancy. She may also have a lack of libido (sexual desire). In men, the symptoms are usually impotence (difficulty getting and maintaining an erection) and lack of libido.

**Chronic pain** itself may also cause lack of libido, impotence and difficulty conceiving. But these symptoms should not get worse after a trial of opioid therapy. If symptoms get worse, it may be a sign that the opioids are causing **hypogonadism**.





### Developing tolerance to opioids

Your body may develop **tolerance** to the analgesic effects of a certain opioid. This is a normal and expected consequence and you may feel that opioids are not working as well as during the trial period.

If you develop a tolerance your doctor may do one of two things:

- They may increase the dose. Again, you will need to go through a trial period to find a new optimal dose.
- They may offer to switch your current opioid to a different opioid. This is most often done if the dose of your current opioid is moderate or high.

"When I first started taking the opioids, they worked fairly well. It's now a year later and they don't work the same. Do I need to switch the medication?"

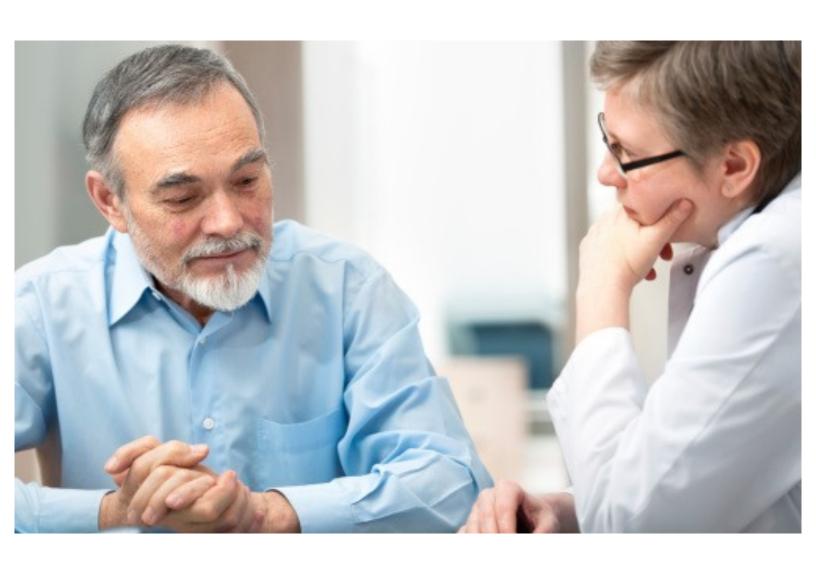
**Anne** 

### Switching opioids

If you switch to another opioid your body will not recognize the new opioid and your body will need to adjust to the new opioid just as it did when you first started taking the old opioid. If you were on a moderate or high dose of the old opioid, your doctor will switch you to a much lower dose of the new opioid to prevent adverse effects or **overdose**, since your body is not tolerant to the new opioid.

"When I took 1 pill of long-acting oxycodone, my body was behaving funny, and my hand didn't feel like my own hand. My body was asking to drink alcohol, even though I never drink and don't have any history of alcoholism. However, I don't have the same feelings when taking short-acting oxycodone or short-acting tramadol. And now tramadol is helping my pain a lot and I only take 2 tablets a day."

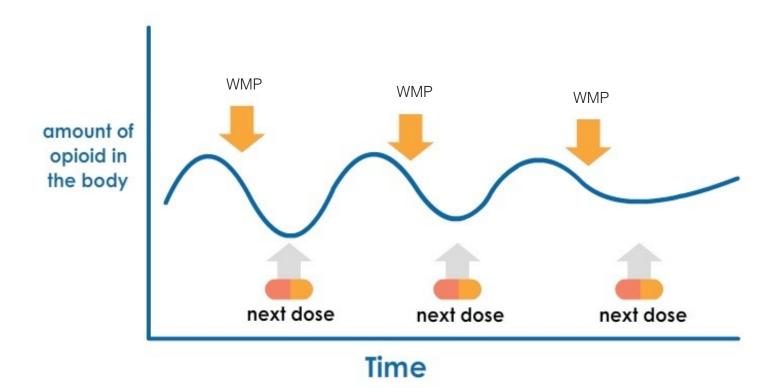
### Greg



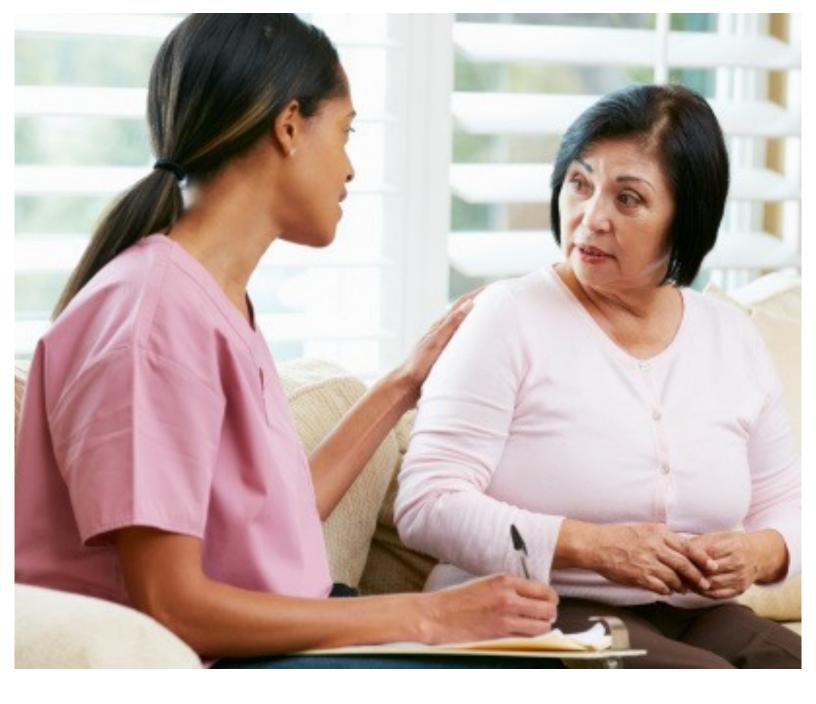
# Withdrawal mediated pain

**Long-acting** opioids have a well-established dosing interval that is specific to the type of formulation. So, for example, there is long-acting morphine with a dose interval of 12 hours, and there are other formulations of long-acting morphine with a dose interval of 24 hours. Some patients notice that as the time for the next dose is approaching, they feel pain all over their body ("diffuse myalgias"), they feel unhappy or unwell ("dysphoria") and some other **withdrawal** symptoms (for example, diarrhea, goose bumps, etc.).

These phenomena are classic of "withdrawal mediated pain," which means that as the amount of opioid starts decreasing in the body, the patient has withdrawal symptoms (see the figure below). Withdrawal mediated pain usually occurs when the patient takes high doses of opioids.



WMP = withrdrawal mediated pain



# STOPPING OPIOIDS

In some instances it may be appropriate or necessary to stop taking opioids. If your pain goes away, because of treatments or lifestyle changes, your doctor may take you off opioids. You may also have to stop taking opioids for other reasons - side effects, medical complications or **addiction** risks. Sometimes, the opioids may not work, despite efforts to find the **optimal dose**. In this case, another medication may be more effective for managing your pain.

Let's take a look at the reasons why you might stop taking opioids and how your doctor will guide you through coming off the medication.

# Reasons for stopping opioid medication









There are a variety of reasons why you might stop taking opioid medication. Here are a few:

### 1. Your pain condition has resolved

You may find that your pain has been reduced. This could happen because of medical treatments, surgeries, or because you were able to make life changes such as losing weight or getting more exercise. A trial of **tapering** is worthwhile to see if less opioid is needed to treat your reduced pain.

### 2. The risks outweigh the benefits

When you first tried opioids, it was because the benefits of the medication outweighed the risks. If something has happened to change that balance, opioids may no longer be worth it. You may need to stop taking opioids if your risk of addiction has increased, you have challenges with handling the medication appropriately, or you're displaying one or more **aberrant drug-related behaviors**. (You'll learn more about these behavior challenges in the next section.)

### 3. The side effects outweigh the benefits

Unfortunately, there's no way to predict if you will experience side effects as a result of taking opioids. Each person responds differently to the medication, and trying it out is the only way to know for sure. If you suffer from severe side effects when taking opioids, you may not be able to tolerate this medication and may need to stop taking it altogether.

### 4. You're experiencing medical complications

When you take opioids for years, chances are you will develop new medical conditions as a result of aging. Examples of conditions that are more common as we get older include kidney and liver diseases. Developing one of these conditions while on opioids can further increase your risk of **adverse events** from the opioid because your body can't process the medication the way it used to. Also, taking high doses of opioids can create new medical problems such as **sleep apnea**, OIH, or **hypogonadism**. If you develop one of these conditions, it is advisable to **stop or reduce opioids**.



### 5. The opioid is no longer effectively managing your pain

If you have been using opioid medication for a while, and you do not see a pain reduction of about 30% and an increase in your function, then opioids may not be for you. (Remember, it may take some time to find the **optimal dose** of opioids that effectively manages your pain; an **opioid trial** typically lasts 8 to 12 weeks.)



### What are aberrant drug behaviors?

Aberrant drug behaviors are actions seen in people who are addicted or are developing an **addiction** to opioids. These behaviors are warning signs of danger and may cause your **prescriber** to consider ending your opioid treatment or finding alternatives to treat your pain.

The table below lists some possible aberrant drug behaviors.

Aberrant Behavior	Descriptions
Altering the route of delivery	Changing how the medication is taken (e.g., taking a pill meant to be swallowed whole and crushing, biting, or injecting the medication instead)
Accessing opioids from sources other than your prescriber	<ul> <li>Taking medication from friend or family</li> <li>Buying street drugs</li> <li>Getting opioid prescriptions from more than one prescriber</li> </ul>
Unsanctioned use or escalating the dose	Taking the medication in a way that isn't prescribed by your doctor (e.g., taking the opioid 3 times a day when it was only prescribed to be taken twice per day)
Drug seeking	<ul> <li>Demanding more medication from your prescriber</li> <li>Frequently claiming you've lost your prescription</li> <li>Harassing your doctor's office for last-minute, fit-in appointments</li> <li>Insisting that nothing else "works"</li> </ul>
Repeated withdrawal symptoms	If you frequently go into withdrawal, then you're likely not taking the medication properly
Development of accompanying conditions	<ul> <li>Developing an addiction to alcohol or street drugs while on opioids</li> <li>Developing a mood or anxiety condition while on opioids that doesn't respond to treatment</li> </ul>
Altered social features	<ul> <li>Isolating yourself</li> <li>Declining social skills</li> <li>Your family expresses concern about your behavior</li> </ul>
Changing views on opioid medication	<ul> <li>Admitting (either to yourself or others) to being addicted or to taking the medication to treat emotional issues (e.g., depression, anxiety)</li> <li>Feeling a strong resistance when your prescriber suggests tapering or switching opioids</li> </ul>

# Stopping opioids - Is it safe?

It is safe to slowly stop taking opioids, even if you are on high doses or have been on the medication for years. It just takes longer to taper off the medication.

The biggest concern most people face when stopping opioids is withdrawal. Withdrawal from opioids can be very unpleasant, but unlike withdrawing from alcohol, it is not life threatening. The only time opioid withdrawal can be risky is during pregnancy, since opioid withdrawal or tapering can cause a miscarriage or premature labour.

If you work with your prescriber to slowly come off opioids, withdrawal can be minimal, or avoided altogether. A slow reduction in the medication allows your body time to adapt to the smaller dose. Slowly reducing your dose over the course of weeks to months is called tapering off opioids. The length of time it takes to taper your opioids will depend on your daily dose, as well as how long you've been taking the medication. The higher the dose and longer the treatment period, the longer the taper will take.



### I wasn't successful at treating my pain with opioids. Are there alternatives to opioids?

Opioids are only one tool in a long list of options to treat chronic pain. We focus on opioids in this book because they are one of the most dangerous and poorly understood treatments. Alternatives to opioids fall into several categories. Here are some examples:

Pharmacological: medications other than opioids.

- Muscle relaxants
- Anti-inflamatories
- Acetaminophen
- Antidepressants
- Anticonvulsants
- Anti-anxiety medication
- Cannabinoids

Physical modalities

- Physiotherapy
- Massage
- Myofacial release
- Heat/ice
- TENS

Interventions: medical procedures

- Surgery
- Injections
- Muscle needling

Other therapies

- Acupuncture
- Cognitive Behavioral Therapy
- Acceptance and commitment therapy
- Relaxation strategies

This list is only a sample of the alternatives to opioids. If opioids aren't right for you, talk to your health care provider about alternatives. Failing an opioid trial doesn't mean you will be punished and expected to suffer. In some people, opioids can do more harm than good and your healthcare provider is trying to protect you from a negative outcome. Other therapies may be safer and work better for you.

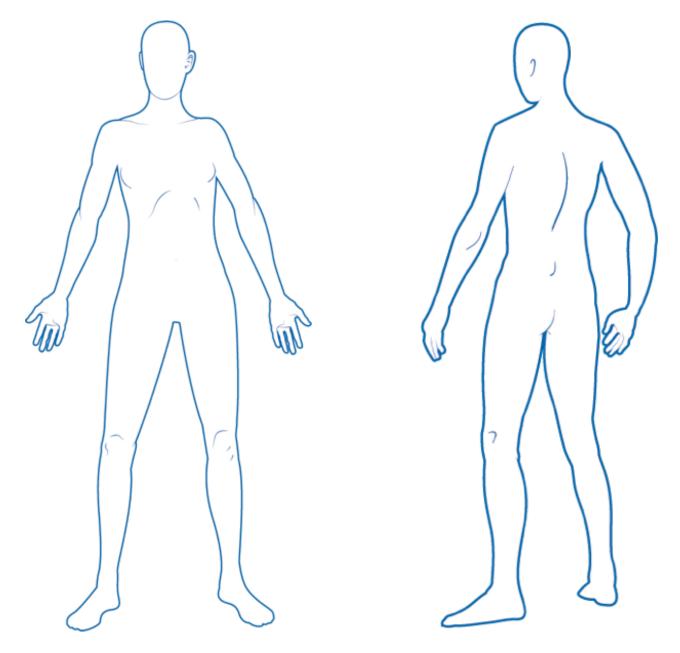


# APPENDIX A: MY PAIN DIARY

DATE:	

Use the body map pictures to show where you have pain. Color in the areas where you have pain. Use a different color for different pains.

FRONT BACK



Developed by Dr. Andrea Furlan & Ms. Amy Robidas, Toronto Rehabilitation Institute, University Health Network, 2015.

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Fill in the table below with details about your pain, but no longer take. Start with your worst pain and finish the list with your least bothersome pain. Use the instructions on page 15 as a guide when filling in the table.

Color used on body	Location of pain	Usual Intensity (0-10)*	Timing	Description	Duration	Aggravating	Relieving

<sup>\* 0</sup> is no pain and 10 is the worst pain that you can imagine. Remember, this is a scale to compare you with yourself. Each person is different, so it is not to compare you with another person. An intensity rating of 10 for you may be different to what is 10 for another person.

Note: This form will be used before your opioid trial and again during your trial.

# APPENDIX B: TREATMENTS YOU HAVE TRIED

DATE: \_\_\_\_\_

Medication name	Maximum dose taken (mg)	Average # times taken daily	Start date	Stop date	How did it work?	Why did you stop?
Opioid analge	esics (painkill	ers):				
Non-opioid a	nalgesics (pai	nkillers):				
Other medica	tions (non-pa	inkillers):				

Now complete the table below listing treatments, other than medication, that you have tried. Use approximate dates if you aren't certain.

Results refers to how the treatment worked. Did it help a little? A lot? Not at all? Did it help for hours/days/weeks? Were there negatives you experienced?

Treatments	Date I Started	Date I Stopped	Results							
Exercises (e.g. physioth	Exercises (e.g. physiotherapy, stretching, pool, etc.)									
Alternative Medicines (	e.g. massage, chiropract	or, acupuncture, osteop	eath, etc.)							
Injections (e.g. nerve bl	ocks, cortisone, trigger	point injections)								
Surgeries										
Other										

## APPENDIX C: PAIN AND DAILY ACTIVITIES

DAT	F٠		
	┗•		

Use this tool to describe your level of function over the last week. Select the one number from 0 to 10 that describes how pain interferes with your activity, with 0 being no interference and 10 being complete interference. Please note: This is a subjective scale used to compare your pain over time. It is not used to compare you to others.

Gene 0	ral acti	vity 2	3	4	5	6	7	8	9	10
<b>Mood</b>	<b>!</b> 1	2	3	4	5	6	7	8	9	10
<b>Walki</b> 0	ng abil	<b>ity</b> 2	3	4	5	6	7	8	9	10
	al worl des bo		k outsi 3	de the 4	home 5	and h	iousev 7	vork) 8	9	10
<b>Relati</b>	ons wit	h othe 2	r peop 3	ole 4	5	6	7	8	9	10
Sleep 0	1	2	3	4	5	6	7	8	9	10
<b>Enjoy</b> 0	ment of	f <b>life</b> 2	3	4	5	6	7	8	9	10
Ability 0	y to cor 1	ncentro 2	a <b>te</b> 3	4	5	6	7	8	9	10
Appe	tite 1	2	3	4	5	6	7	8	9	10

Note: This form will be used before your opioid trial and again during your trial.

Adapted from the Brief Pain Inventory, with permission from Dr. Charles Cleeland, Pain Research Group.

# APPENDIX D: PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

Over the	past 2 weeks	, how often	have you	u been	bothered	by any	of the	following	proble	ms?

Place a check mark in the boxes that most closely apply to you.

	Not at all	Several	More than	Nearly
	Not at all	days	half the days	every day
1. Little interest or pleasure in doing things				
2. Feeling down, depressed or hopeless				
3. Trouble falling or staying asleep, or sleeping too much				
4. Feeling tired or having little energy				
5. Poor appetite or overeating				
6. Feeling bad about yourself - or that you are a failure or have let yourself or your family down				
7. Trouble concentrating on things, such as reading the newspaper or watching television				
8. Moving or speaking so slowly that other people could have noticed. Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual				
9. Thoughts that you would be better off dead, or of hurting yourself				
	Not difficult	Somewhat	Very	Extremely
	at all	difficult	difficult	difficult
10. If you checked off any problems, how				
difficult have these problems made it for you to				
do your work, take care of things at home, or				
get along with other people?				

Used with permission.

DATE:

Developed by Drs. Robert L. Spitzer, Janet B. W. Williams, Kurt Kroenke, and colleagues, with an educational grant from Pfizer Inc

## APPENDIX E: MODIFIED OPIOID RISK TOOL

DATE:			

To assess your risk of opioid misuse your doctor will ask you questions and discuss any concerns you have about the possibility of developing an misuse. Some of the questions the doctor may ask are found below in the modified Opioid Risk Tool.

Select "Yes" for all risks that apply to you. It is very important to be truthful in your answers to properly determine your risk of misuse.

Questions	Yes	No
Do you have a family history of substance abuse?		
Alcohol		
Illegal drugs		
Prescription drugs		
Do you have personal history of substance abuse?		
Alcohol		
Illegal drugs		
Prescription drugs		
Are you 16-45?		
Do you have a history of major psychological trauma? (e.g., PTSD, survivor of war, sexual abuse, etc.)		
Do you have any psychological disorders?		
Depression		
Attention deficit disorder		
Obsessive compulsive disorder		
Bipolar disorder		
Schizophrenia		

PTSD = post-traumatic stress disorder.

Adapted from the Opioid Risk Tool with permission from Dr. Lynn R. Webster.

## APPENDIX F: OVERDOSE ASSESSMENT

$DA^{T}$	ΓΕ	•						

To check how many risk factors for opioid overdose you have, use the Overdose Assessment below. Select "Yes" for all those that apply, and then add up the number of "Yes" answers to get your total. The higher your total, the more you are putting yourself at risk of overdose. Discuss your risk factors with your health care provider.

Questions	No	Yes		
Are you older than 60 years of age?	0	1		
Do you take sleeping pills (benzodiazepines)?	0	1		
Do you drink more alcohol than the recommendation by the Canada's Low-Risk Alcohol Drinking Guidelines? (see page 30)	0	1		
Do you have a kidney condition or disease?	0	1		
Do you have a liver condition or disease?	0	1		
Do you have chronic obstructive pulmonary disease?	0	1		
Do you have sleep apnea?	0	1		
Do you have another sleep disorder (e.g. insomnia, restless legs, narcolepsy, etc.)?	0	1		
Do you have dementia?	0	1		
TOTA				

Developed by Dr. Andrea Furlan & Ms. Amy Robidas, Toronto Rehabilitation Institute, University Health Network, 2015, based on the Canadian Guideline for Safe and Effective Use of Opioids.

NEXT VISIT DATE:	
START TRACKING DATE:	

APPENDIX G: MY MEDICATIONS TABLE

Once you've started your opioid trial, use the table below to fill in the details of your medications and check the days of the week when you take them. Start this tracking a week before your next appointment with your healthcare provider. If you don't have enough space, make multiple copies.

AA - Jii	# times take/day*								
Medication	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.		
Opioid analgesics (painkillers):									
Medication: Dose (mg):									
Medication: Dose (mg):									
Non-opioid analgesics (painkillers):									
Medication: Dose (mg):									
Medication: Dose (mg):									
Other medications (non-painkillers):									
Medication: Dose (mg):									
Medication: Dose (mg):									
Medication: Dose (mg):									
Medication: Dose (mg):									

<sup>\*</sup> Write in the number of times you take the medication in each day, e.g., 3 pills/day. Dose = The quantity of medication, e.g., 5 mg per pill.

APPENDIX H: ADVERSE EVENTS TABLE								
NEXT VISIT DATE:								
START TRACKING DATE:								
Using the table below, track any adverse events (side effects) that you experience over the week while taking opioids. Start this tracking a week before your next appointment with your healthcare provider.								
Day of the Week		Ad	verse Events					
Sunday	☐ Constipation☐ Dizziness	☐ Nausea ☐ Dry Skin	☐ Vomiting☐ Itching	☐ Sleepiness ☐ Other:				
Monday	☐ Constipation☐ Dizziness	☐ Nausea ☐ Dry Skin	☐ Vomiting ☐ Itching	Sleepiness Other:				
Tuesday	☐ Constipation☐ Dizziness	☐ Nausea ☐ Dry Skin	☐ Vomiting ☐ Itching	☐ Sleepiness ☐ Other:				
Wednesday	☐ Constipation☐ Dizziness	☐ Nausea ☐ Dry Skin	☐ Vomiting ☐ Itching	☐ Sleepiness ☐ Other:				
Thursday	☐ Constipation☐ Dizziness	☐ Nausea ☐ Dry Skin	☐ Vomiting ☐ Itching	☐ Sleepiness ☐ Other:				
Friday	☐ Constipation☐ Dizziness	☐ Nausea ☐ Dry Skin	☐ Vomiting ☐ Itching	☐ Sleepiness ☐ Other:				
Saturday	☐ Constipation☐ Dizziness	☐ Nausea ☐ Dry Skin	☐ Vomiting ☐ Itching	☐ Sleepiness ☐ Other:				

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# **GLOSSARY**

### Aberrant drug-related behavior

A behavior that may cause suspicion about addiction in opioid-treated pain patients (Passik 2006)

### Abuse, drug

Any use of an illegal drug, or intentionally taking a medication for a non-medical purpose such as altering one's state of consciousness, e.g., "getting high" (APS/ACPM 2009)

#### Addiction

A primary, chronic, neurobiological disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving. (Utah Department of Health 2009)

#### **Adverse events**

Also called side effects, these are the undesirable consequences on the body that can sometimes result from taking medications

### **Analgesics**

Pain relievers

#### Baseline pain

Pain that is constant throughout the day.

### Dependence, physical

A withdrawal syndrome caused by the body adapting to the drug. It can be brought on by abruptly stopping the medication, a rapid reduction in dose, decreasing levels of the drug in the blood, and/or another drug competing for the same sensors in the body (antagonist). (APS/ACPM 2009; Utah Department of Health 2009)

#### Dose, optimal (of opioids)

The dose reached by the BALANCE of three factors:

- Effectiveness: improved function or at least 30% reduction in pain intensity
- Plateauing: where the effectiveness plateaus and increasing the dose provide little benefit
- Adverse effects/complications: where these effects are manageable

### Hyperalgesia

An increased response to a stimulus which is normally painful (APS/ACPM 2009)

### Hypogonadism

Low sex hormones in the body

### Misuse, opioid

Use of an opioid in ways other than those intended by the prescribing physician (sometimes also called problematic opioid use) (Ballantyne 2007)

### **Myocardial infarction**

Heart attack

### **Nervous system**

The network of nerves in the body that carries messages to the brain through the spinal cord

### **Neuropathic pain**

Also called "nerve pain", it is pain caused by damage to the nervous system

### **Nociceptive pain**

Also called normal pain, it is pain caused by damage (or a potentially damaging force) to tissues in the body

### **Opioid trial**

A trial of an opioid, usually lasting 8 to 12 weeks, when the dose is gradually increased until an **optimal dose** is achieved

#### Opioids, long-acting

Opioids that take a while to work in the body, but also last a long time (8, 12 or 24 hours)

### Opioids, short-acting

Those opioids that start working in your body very fast (usually in 20 or 30 minutes), but they also wear off quickly (between 3 and 4 hours)

### Opioids, strong

Opioids that are more potent than weak opioids and are approved to manage moderate to severe pain. Examples: morphine, oxycodone, hydromorphone, fentanyl, methadone, buprenorphine, tapentadol and oxymorphone

#### Opioids, weak

Opioids that have a limited potency and are used for managing mild pain. Examples: codeine, hydrocodone and tramadol

#### **Overdose**

Having too much of a drug in the body leading to side effects or possibly even death. Overdose can result from doubling up on medication, taking multiple medications that act on the body in similar ways, or from the drug not being adequately eliminated from the body (e.g., through kidney or the liver not functioning properly)

### Pain, breakthrough

Pain that may occur when you do some physical activity that results in pain above your normal tolerance levels (APS/ACPM 2009). This type of pain is not always constant during the day, but occurs intermittently

### Pain, chronic

Pain that persists for more than six months (College of Physicians and Surgeons of Ontario 2000)

### **Plateauing**

When the effectiveness of a drug stops improving despite increasing the dose

#### Prescriber

The person working with you to determine the right medication and providing you with the right medication. Many healthcare professionals may be prescribers, including your family doctor or nurse practitioner

### Sleep apnea

A sleep condition characterized by periods of interrupted breathing

### **Tapering**

A gradual decrease in a dose of a drug; could result in a lower daily dose or stopping of the drug altogether

#### Tolerance

A state where you body has adapted to drug exposure resulting in decreases to one or more of the effects of the opioid over time (APS/ACPM; Utah Department of Health)

#### Withdrawal

A characteristic syndrome caused by abruptly stopping a drug

### Withdrawal mediated pain

As the amount of opioid starts decreasing in the body, the patient has withdrawal symptoms such as pain all over their body ("diffuse myalgias"), feeling unhappy or unwell ("dysphoria") and some other withdrawal symptoms (for example, diarrhea, goose bumps, etc.)

# REFERENCES

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# ADDITIONAL RESOURCES

The Arthritis Society The Canadian Pain Society

(<u>www.arthritis.ca</u>) (<u>www.canadianpainsociety.ca</u>)

Best Life Rewarded Chronic Pain Association of

(<u>www.bestliferewarded.com</u>) Canada

(<u>www.chronicpaincanada.com</u>)

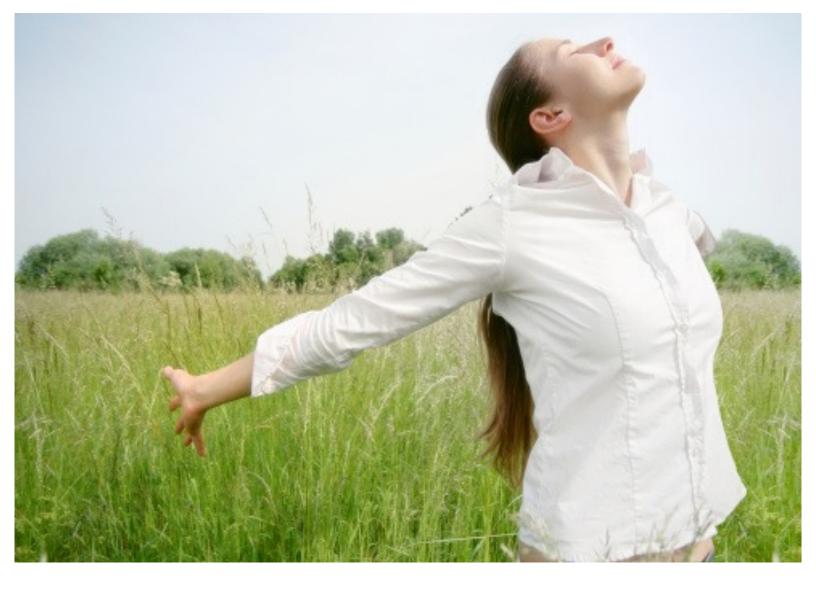
Canadian Institute for the Relief of

Pain and Disability Pain.com

(<u>www.cirpd.org</u>) (<u>www.pain.com</u>)

Canadian Pain Coalition People in Pain

(www.canadianpaincoalition.ca) (www.pipain.com)



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