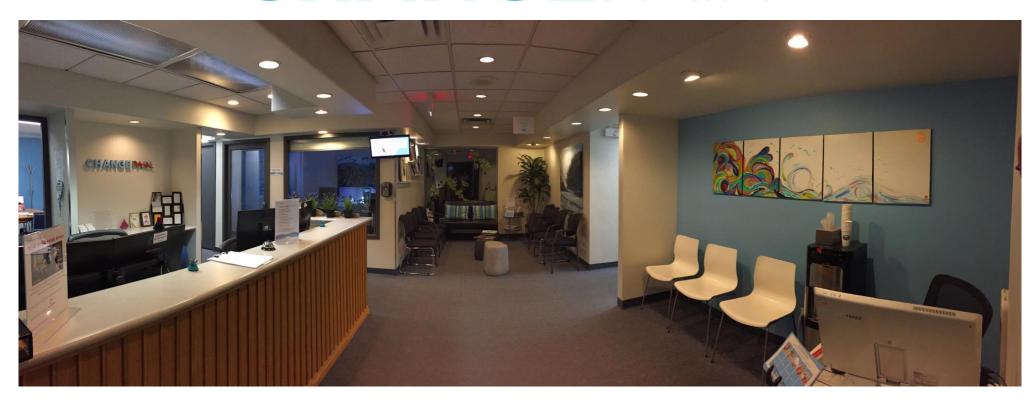
Pain and Parkinson's Disease

June 14, 2021

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CHANGEPAIN



- Types of pain experienced by Parkinson's patients
- What's the typical CHANGEpain patient journey and why?
- How to make the most of our services including optimizing selfmanagement?
- Services outside of CHANGEpain

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Services outside of CHANGEpain

Parkinson's and pain

- No classification system (best is Ford 2010)
- Pain is the most frequent non motor symptom and prevalence up to 68-83% if all subtypes included
- the prevalence of pain among PD patients varies because of the disease stage, co-morbidities, and evaluating tools.
- Risk factors: an early age of onset, long disease duration, motor complications, concomitant depressive symptoms, female gender, and associated medical conditions.
- Musculoskeletal pain, chronic body pain (central or visceral), fluctuation-related pain, nocturnal pain, orofacial pain, pain with discolouration/oedema/swelling, and radicular/neuropathic pain; musculoskeletal pain as the most common type.
- Potential underlying mechanisms include a disruption of peripheral nociception and alterations in central pain threshold/processing.
- In advanced stage of patients with PD, polyneuropathy could occur in patients using high dosage of levodopa.
- Pain often correlates to other non-motor symptoms of PD, including depression, sleep, and autonomic symptoms. Dopaminergic drugs, non-dopaminergic medications, botulinum toxin, deep brain stimulation, and physiotherapy have shown some benefits for certain types of PD-related pain.

Author, year	Number of participants	Prevalence of pain	Classification and rate of pain (n, %) Central pain (PD vs non-PD: 11 vs. 0)_		
Snider et al., 1976 [18]	101 PD patients	PD patients (40%)			
	149 non-PD subjects	Non-PD participants (8%)	Burning (PD vs non-PD: 22 vs. 3)		
			Tingling (PD vs non-PD: 21 vs. 1)		
			Numbness (PD vs non-PD: 29 vs. 3)		
Goetz et al., 1986 [19]	93 PD patients	PD patients (45%)	Musculoskeletal pain (32, 74%)		
	No controls		Dystonic pain (12, 28%)		
			Radicular pain (6, 14%)		
			Akathisia (1, 2%)		
			Thalamic pain (0)		
Scott et al., 2000 [95]	93 PD patients	PD patients (41–54%)	Neck pain (Male vs. Female: 54% vs. 45%)		
	No controls		Back pain (Male vs. Female: 48% vs. 41%)		
			Muscle cramps (Male vs. Female: 45% vs. 41%)		
Tinazzi et al., 2006 [20]	117 PD patients	PD patients (40%)	Musculoskeletal pain (21%)		
	No controls		Dystonic pain (8%)		
			Central primary pain (40%)		
			Akathisia (4%)		
Negre-Pages et al. 2008 [98]	450 PD patients	PD patients with chronic pain (62%)	Dystonic pain (36%)		
	98 controls	PD patients with non-chronic pain (6%)	Neuropathic pain (7%)		
		Controls (58%)	Akathisia (5%)		
			Musculoskeletal (2%)		
			Non-PD pain (31%)		
Defazio et al., 2008 [99]	402 PD patients	PD patients (70%)	Dystonic pain (7%)		
	317 controls	Controls (63%)	Musculoskeletal pain (25%)		
			Peripheral neuropathic pain (5%)		
			Central neuropathic pain (4%)		
Beiske et al., 2009 [30]	176 PD patients	PD patients (83%)	Musculoskeletal pain (70%)		
	No controls		Radicular/neuropathic pain (20%)		
			Dystonic pain (40%)		
			Central pain (10%)		
Hanagasi et al., 2011 [100]	176 PD patients	PD patients (65%)	Musculoskeletal pain (44%)		
	No controls		Radicular or neuropathic pain (11%)		
			Dystonic pain (19%)		
			Central pain (13%)		
Zambito Marsala et al., 2011 [96]	106 PD patients	PD patients (62%)	N.A.		
	51 controls				
Allen et al. 2016 [97]	176 PD patients	PD patients (81%)	N.A.		
	No controls				
Fu et al., 2018 [7]	144 PD patients	PD patients (52%)	N.A.		
	No controls				

Types of patients seen at CHANGE AND CHANGE

- Mechanical
 - Myofascial
 - spine and joint
- Neuropathic
 - complex regional pain syndrome
 - post-surgical
 - post-cancer therapy
 - chronic diseases related
- Visceral
 - Pelvic
 - Post-surgical
- Central Sensitization
 - Widespread
 - headache
 - Pelvic
 - post-trauma

- Opioid weaning
- Early Intervention and functional restoration
 - peri-surgical optimization and recovery
 - prevention/early rehabilitation from injury

- Few exclusion criteria:
 - acute psychiatric or substance use issues
 - uncompliant

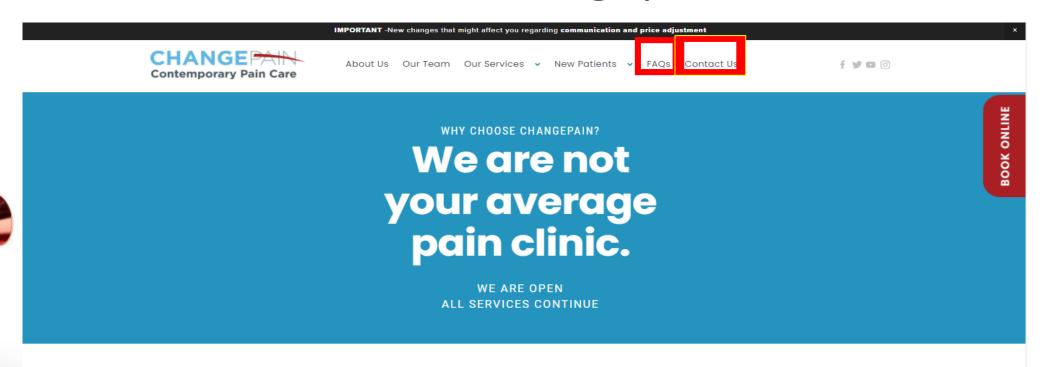
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 What's the typical CHANGEpain patient journey and why?

 How to make the most of our services including optimizing selfmanagement?

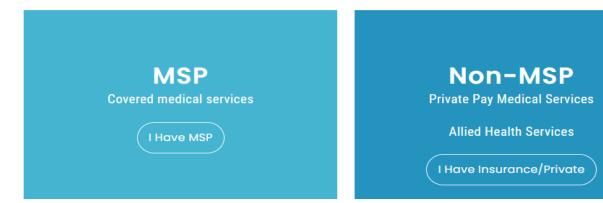
Services outside of CHANGEpain

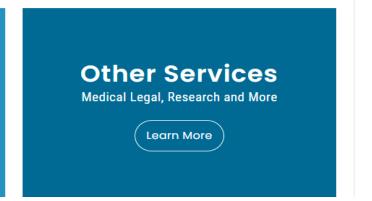
www.changepain.ca

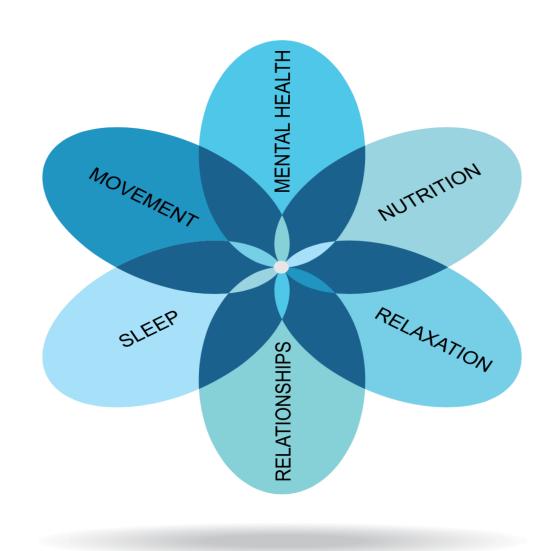


Pain is a call to action

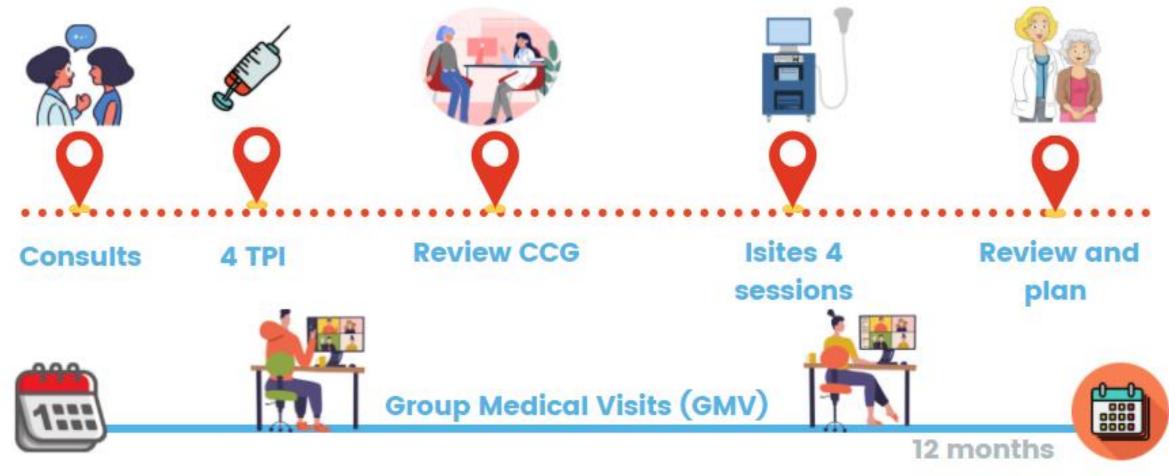
START YOUR RECOVERY TODAY.







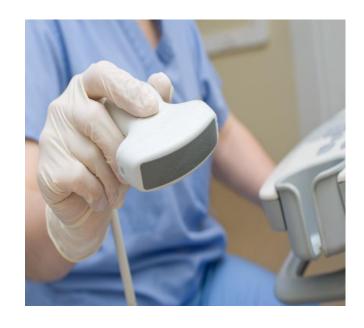
CPC Patient Journey: MSP Medical Therapies







Advanced Pain Procedures



NEW
ICBC Coverage Private Pay
Medical Therapies

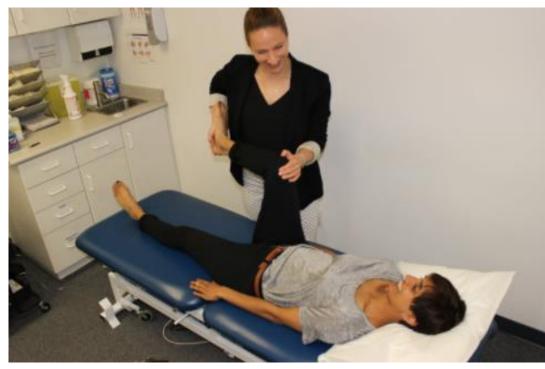
MSP covered

- Trigger point injections
- ISITES-ultrasound guided procedures (prescriptions)
- Radiofrequency Lesionning (upgrade fees)

Private pay /insurance

- Intramuscular Stimulation (IMS)
- Prolotherapy
- Regenerative therapies (PRP)
- Ketamine infusion for pain or depression
- Lidocaine infusion for pain
- Botox for headache or spasticity

When to start allied health services?



- Pain trained practitioners
- ICBC covered, Direct Billing third party coverage
- Self schedule Online
- Remote consultations available
- Rapid access to care

- Chiropractor
 - Dr. Lindsay Rite
- Physiotherapists
 - Ashleigh Low &
 - Keri Thibodeau
- Kinesiologist/Somatic Therapist
 - Amy Kiara Ruth
- Exercise Physiologist
 - Duncan Bird
- Pain Coach
 - Sarah Jamieson





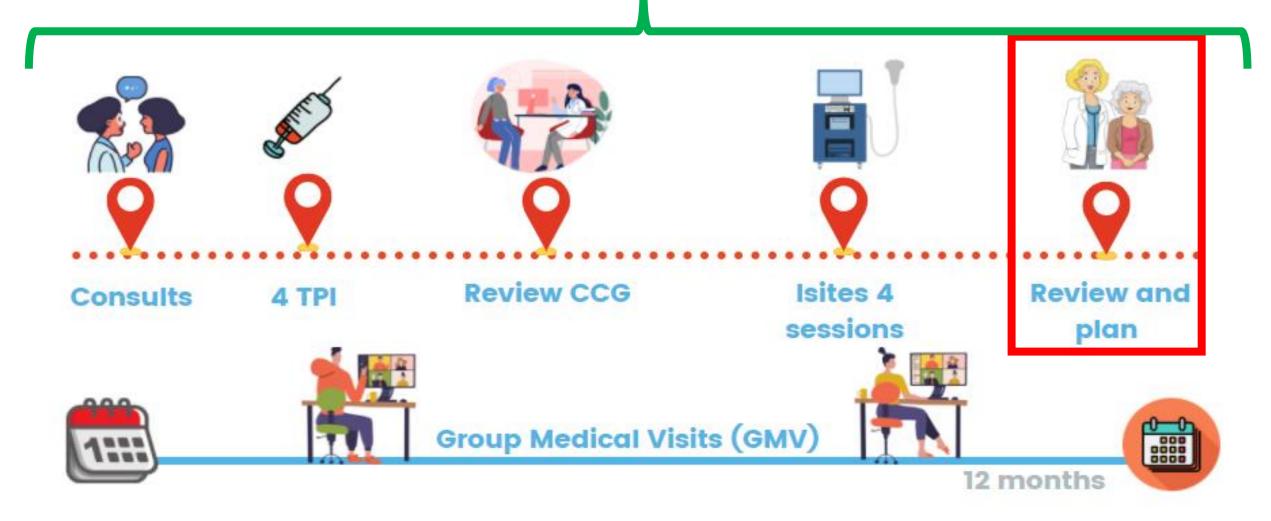








CPC Patient Journey: Medical - Allied health Therapies





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Services outside of CHANGEpain

How do virtual GMVs work?





MSP rules:

- Physician and/or cofacilitator
- max one GP-led /one specialist-led
- If seen doctor that day, cannot take their GMV (only ONE MSP visit per doctor)
- All requests are approved by staff within 24 hours. Email confirmation sent after
- GP-Led GMV allows **NEW** patients to join CHANGEpain without a referral
- Etiquette: quiet space, mute, confidentiality, no recording, on time arrival

Which GMVs are for me?

GROUP MEDICAL VISIT	PAIN	MENTAL HEALTH	PHYSICAL ACTIVITY	NUTRITION	SLEEP	Unique Group
GMV « Empowering Series: Pain Neuroscience»	~	~		~	~	
GMV «Veterans Helping Veterans»	~	~		~		
GMV «Morning Streth and Activation»	~	~	~			~
GMV «Introduction, Tissue healing, Active Rehab & Injury Prevention »	~	~	~			
GMV «Neck Pain and Headache»	~		✓			
GMV «Shoulder and Arms»	~		✓			
GMV «Hip, Knee and Legs»	~		✓			
GMV «Low back, trunk and core»	~		✓			
GMV «Balance and Fall Prevention »	~		✓			
GMV «YIN Yoga »	~	✓	✓			
GMV «Restorative Yoga»	~	✓	~		>	
GMV «Yoga for Beginners»	~	~	✓			
GMV «Hatha Yoga»	~	~	✓			
GMV «Kundalini Yoga»	~		✓			
GMV «Hatha Flow Yoga»	~		✓			
GMV «Relaxation»	~	✓			>	
GMV «Central Sensitivity/Widespread»	~	~			>	
GMV «Sleep»	~	~			>	
GMV «Surgical Patients Optimazation Series»	~	~	✓	~	>	~
GMV «Staying Healthy »	~	~	✓	~	>	
GMV «Somatic Therapy»	~		~			

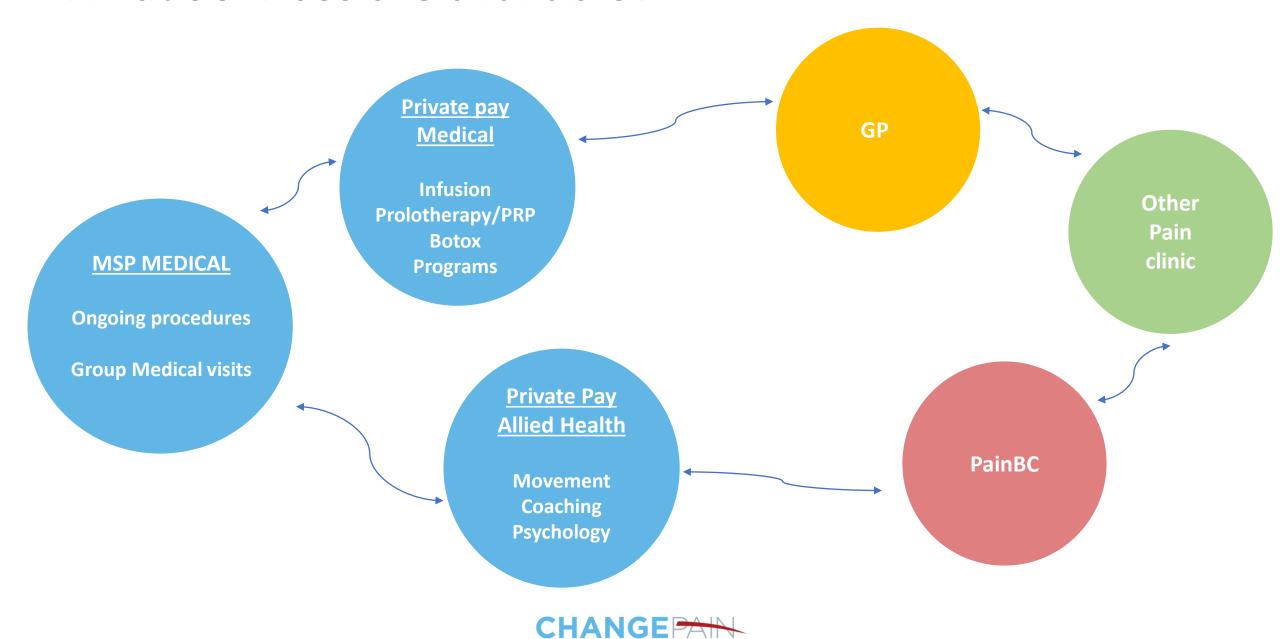


SPOC (Surgical Patient Optimization)



- Optimization before surgery
- UBC study: July to December 2021
- Post-op early recovery and pain/physical therapy management
- Consults
- SPOC GMV
- Coordinated MSP care
- Add private pay procedures and allied health

What Services are available?



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Other Services

R-Transcranial Magnetic Stimulation (li 2020)

Burst spinal cord stimulation (Furusawa 2020)

Microglia and gut microbiota (Joers 2020)

Contact Us Online

The best way to contact us is through this online form. Online response will be faster than phone call.

Name *	BOOK ONLI
	DOK
First Name	Last Name
Preferred Phone Number *	
Email Address *	
Services You are Reaching Out for? * MSP Services ✓	
Area of Service you are reaching out for? *	
Medical Services 🕶	
Reason for Reaching Out	
Inquiry	
Message *	
SUBMIT	

CHANGEPAIN



QUESTIONS?