

ManagingLife

Using Digital Innovation to Manage Chronic Pain Disability Claims

INCLUDING CASE STUDY AT:



Insurance

ManagingLife

Helping clients with disabilities self-manage their pain and get the treatment they need.



Using Digital Innovation to Manage Chronic Pain Disability Claims

Learn how **Manage My Pain** has been used within disability claims to help clients improve their claims experience and reduce their claim durations.



Chronic pain is a **leading cause** of disability claims



Over a **2.5 year period with RBC Insurance**, 52% of clients with disabilities who were offered Manage My Pain used it for at least 30 days



Managing chronic pain is complex and needs a **multi-dimensional treatment approach**



On average, clients with disabilities who used Manage My Pain had shorter total claim durations: **5.4 fewer months** for those who started using it during long-term disability, and **7.5 fewer months** for those who started using it during short-term disability



Manage My Pain is a digital solution for people with chronic pain to **self-manage their condition** and to communicate with their care-team and case manager

CHRONIC PAIN IS DEFINED AS: Persistent or recurrent pain that progresses over a long period of time (*3 months or more*).

Chronic Pain is a Leading Cause of Disability Claims

Studies have shown that one in five Canadian adults has chronic pain. Chronic pain is one of the most common reasons for seeking health care in both Canada and the United States.

Three quarters of the people waiting for care at Canadian pain clinics say it interferes with their normal work life. The combined direct and indirect costs in Canada are estimated to be \$56 to \$60 billion per year.¹

While other chronic conditions such as mental health have attracted awareness and visibility, chronic pain has remained largely invisible and underserved. As a result, it is often not recognized as a leading cause of disability. Indeed, chronic pain is estimated to underlie more than 30% of all disability claims, largely due to musculoskeletal conditions.²

Why has chronic pain received less attention than other chronic diseases and conditions? One of the main reasons is that chronic pain is rarely diagnosed as its own condition. Instead, it is perceived as a symptom that underlies many other conditions. Many disability carriers categorize reasons for disability by using the World Health Organization's International Classification

of Diseases (ICD) codes. As chronic pain is a symptom associated with thousands of diagnoses, it does not often get analyzed as its own category. Fortunately, this situation is rectified in the updated ICD-11 classification system.³ The inclusion of the chronic pain conditions in the ICD-11 will hopefully further the recognition of chronic pain as a health problem in its own right and contribute to improved access to adequate pain treatment for persons with chronic pain worldwide.

Due to its prevalence with disability claimants, chronic pain is a priority area for disability carriers. Even if you focus only on musculoskeletal conditions, it is estimated that \$18M in long-term disability (LTD) benefits is paid out to claimants with chronic pain for every 1,000 claims every year.⁴ Chronic pain claims also tend to stay open longer than other claims. For example, although the primary trigger for disability may be an injury or surgery, chronic pain may be a secondary result which extends the functional impairment. As a result of longer-than-average claim durations, chronic pain claims have a significant impact on the financial position of a disability plan, which can translate to higher premium rates.

¹ Canadian Pain Task Force Report. Health Canada, March 2021.

² Integrated Benefits Institute, STD & LTD Benchmarking, 2024.

³ World Health Organization, ICD-11 for Mortality and Morbidity Statistics, 2025.

⁴ Integrated Benefits Institute, STD & LTD Benchmarking, 2024.

Managing Chronic Pain is Complex

Given its subjective nature and prevalence, chronic pain is one of the most difficult chronic conditions to manage. Challenges exist for both clients who have chronic pain and doctors who treat them.

Chronic pain is influenced by a complex interplay of biological, psychological, and social factors unique to everyone experiencing the pain. Current approaches to managing chronic pain rarely adequately address the psychological and social dimensions of pain in an integrated manner alongside biological factors. While some people with chronic pain are fortunate to be seen periodically by a pain specialist, few have access to a multidisciplinary pain clinic where key services, such as physiotherapy and psychology are provided. Clients in more rural or remote communities have little or no access to a pain specialist.

A common service offered to clients with disabilities is physical therapy. While physical therapy is an essential aspect of pain management in a subset of people with chronic pain, it has limitations. It is dependent on access, typically face-to-face, to a qualified physiotherapist. Also, it requires adherence and commitment by the claimant, and it is relatively expensive. Most importantly, physical therapy does not help clients who have chronic pain due to conditions that do not benefit from physiotherapy (e.g. migraines, arthritis).

Another example is psychological therapy. While clients with chronic pain often need psychological support, it is sometimes difficult for them to recognize it. Studies have shown that over 50% of people with chronic pain also suffer from anxiety/depression.⁵ Recommendations to participate in psychological therapy can sometimes be received as an invalidation of one's pain, making it challenging to motivate someone to participate.

Many clients with chronic pain obtain relief from opioid medications, which have complications related to tolerance and dependency. As a result, guidelines for treating chronic non-cancer pain with opioids recommend first optimizing non-opioid pharmacotherapy and non-pharmacological therapy.⁶ While chronic pain does diminish through the use of opioids, it is never recommended as a first-line therapy.

Regardless of the therapies or interventions used, progress is difficult to measure and assess. Given that there is no blood test or x-ray for pain, clinicians are dependent on how their patients describe their pain. It is challenging for people to find the vocabulary to describe their pain experiences.

The most recognizable way to measure pain is through the Numeric Rating Scale (NRS), where a patient rates their pain on a scale from 0 to 10. However, when patients are asked for their average pain score since the last clinical visit, which could have been 3 months ago,

⁵ Rayner, Lauren and al. *Depression in patients with chronic pain attending a specialised pain treatment centre: prevalence and impact on health care costs*, PAIN: July 2016 - Volume 157 - Issue 7. (Retrieved April 2020). [Website link](#)

⁶ *Guideline for opioid therapy and chronic noncancer pain*. Busse, J. and al. CMAJ May 08, 2017 189 (18) E659-E666. (Retrieved May 2020). [Website link](#)

the responses are subjective and suffer from recency and recall bias. If a patient has recently experienced severe pain prior to their visit, they are more likely to exasperate their overall chronic pain condition, which can result in poor diagnosis by their pain specialist. How can a patient remember yesterday's pain sufficiently to rate it relatively to today's pain? As a result, more importance is now being placed on assessing the effectiveness of treatment on a patient's function.

As the information requested becomes more complex, tools need to be developed to support clients. This lack of support is an important gap for those with chronic pain. It is only within the last 5 years that digital tools for other chronic conditions like diabetes or mental health have become widely available for people to feel empowered and do something about their situation "outside of the clinic" and "between" visits. These tools effectively record and share important events with their healthcare practitioners and enable clients to be active participants in their treatment.

Manage My Pain:

A Digital Solution to Empower Clients, Doctors, and Case Managers

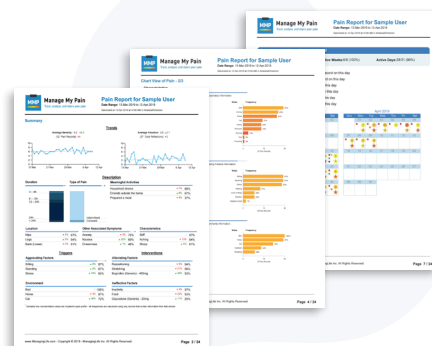
Manage My Pain (MMP) addresses many of the issues that people with chronic pain face when self-managing their condition and communicating with their doctors or case managers.

Developed in partnership with Canada's largest academic hospital, the University Health Network (UHN), MMP brings together **three components**:



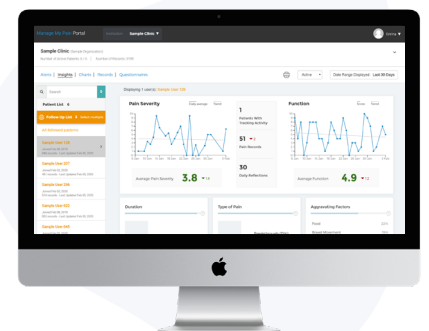
CLIENT APPS

Keep clients engaged while enabling self-management



CLINICAL REPORTS

Improve treatment plans when clients share with their care-team



MONITORING PORTAL

Allow doctors and case managers to monitor client progress

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This app is really nice because I can have a running list of how I feel everyday what's going on so I can always look back and talk to my doctors about it. So many things happened and I have so many problems that I forget to talk to my doctors about some of them. This helps me remember.

Manage My Pain User, SINCE 2015

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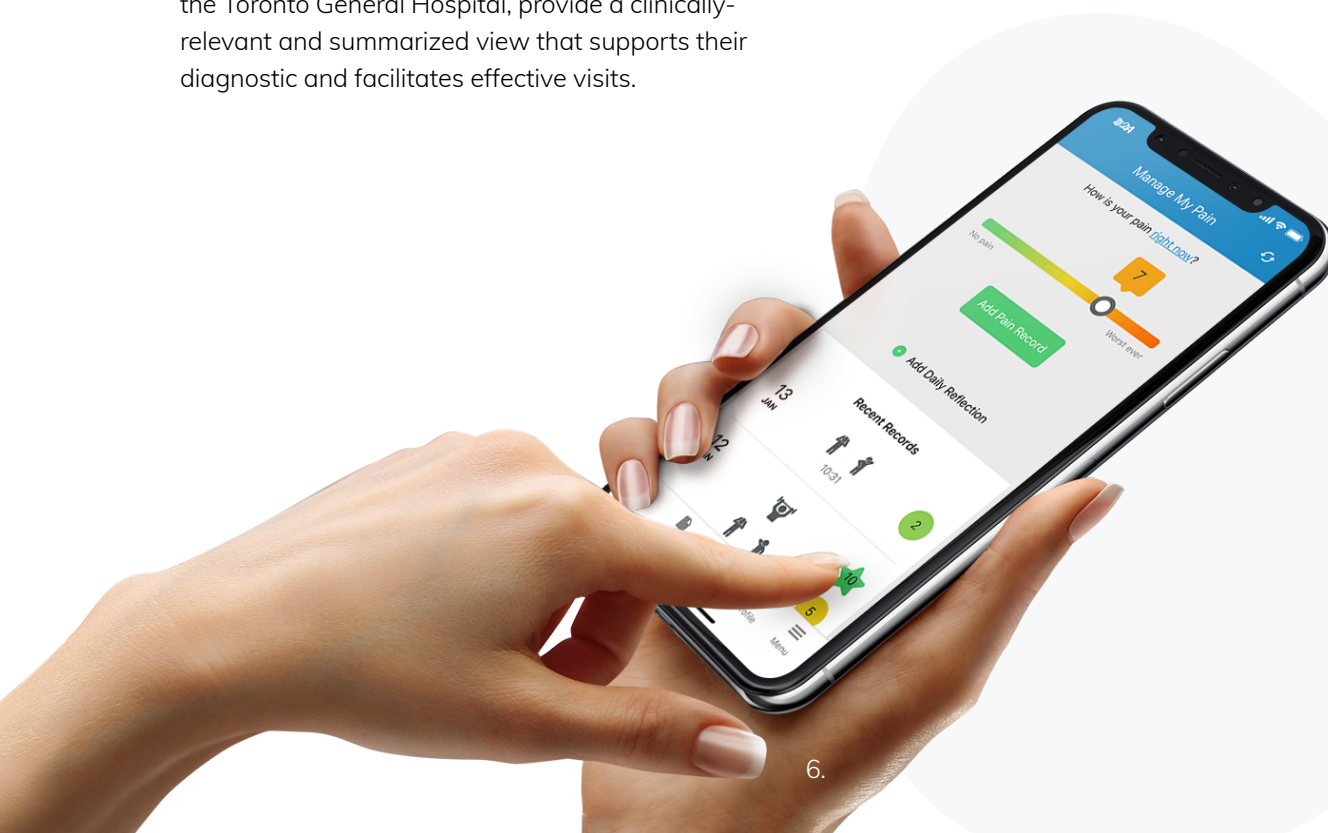
One of central features of the client app is the **Daily Reflection**, which allows clients to record the meaningful activities they accomplished and serves as a proxy for assessing function.

Co-developed with the University Health Network (UHN), the **Daily Reflection** is based on principles from Acceptance and commitment therapy (ACT) by helping the client focus on activities that move them toward valued behaviour.

FOR THE CLIENT, MMP empowers them to take charge of their condition. It requiring less than 60 seconds a day to utilize and can be customized to a client's personal situation. With regular use, clients are empowered and gain self-awareness through charts and graphs that highlight patterns and trends in their pain and functioning.

FOR DOCTORS, MMP provides a more objective measure of a patient's progress and response to an intervention or treatment. Its intuitive reports, co-developed by the multi-disciplinary pain clinic at the Toronto General Hospital, provide a clinically-relevant and summarized view that supports their diagnostic and facilitates effective visits.

FOR CASE MANAGERS, MMP allows the remote monitoring of a client's progress in response to their treatment plan. It also allows the case manager to create a more trusted relationship with the client so that they are more willing to consider suggestions and recommendations. Most importantly, the information available to case managers in the remote monitoring portal can help the case manager to identify other programs and services which would benefit their client.



Manage My Pain Helps to Shorten Claim Durations and Improve Claims Experience

Manage My Pain (MMP) is a much-needed digital claims innovation that supports client treatment plans for returning to their baseline level of function. RBC Insurance piloted the use of MMP with its Group and Individual clients with disabilities starting in 2018. During the first year, RBC Insurance was interested in gauging clients' interest for using a digital health solution to support their pain management. Once that was established, the focus shifted towards determining if using a digital pain management solution would translate into a faster return to work. Over a 2.5 year period, 209 clients were registered in MMP.

Case managers offered MMP to clients who they felt could benefit from the tool, primarily due to a chronic pain condition. Clients registered through a dedicated URL and were given the option to share their information from MMP with RBC Insurance. All clients were then given access to a fully-upgraded version of MMP to track their pain and function, self-manage their condition, and share reports with their care-team. Case managers monitored their clients' progress through the MMP portal and used the information during discussions with their clients.

After the first year, it was clear that most clients receiving Group and Individual disability benefits that suffered from chronic pain and were offered MMP were interested in using a digital health solution to support its management. 59% of clients offered the MMP services agreed to register an account in MMP and 94% consented to sharing their data with RBC Insurance. As is the case with most apps, keeping users engaged is challenging, and therefore retention was defined as a critical success factor. As a benchmark, top-performing health apps have an average 7-day retention rate of 21%, which drops to 15% after 30 days.⁷ At RBC Insurance, 52%

of clients who registered an account with MMP continued using it for at least 30 days, more than 3 times the average for top-performing health apps. On average, clients used the app for 4.5 months and recorded information 3 out of every 4 days at an average of 103 records per user.

Why did MMP have such a high retention rate with RBC Insurance's clients with disabilities? Because clients found value in usage. According to a survey sent to clients, 59% felt that their claims experience improved by being offered MMP free of charge, and 55% found it easier to communicate their pain to their doctors.

However, the real value of MMP was its impact on claim durations: clients with disabilities who registered for MMP had shorter claims durations. On average, clients with disabilities who used MMP had shorter total claim durations: 5.4 fewer months for those who started using it during long-term disability (LTD), and 7.5 fewer months for those who started using it during short-term disability (STD).

Disability duration was determined as the difference between the date of disability and the date of claim closure, even if the client had progressed from STD to LTD. Savings were determined by comparing the disability duration of 74 clients with closed claims who used MMP to a historical set of claims with similar demographics. Of those included in the savings calculations, approximately half were introduced to MMP while on STD and the other half while on LTD. The clients were balanced across all age categories; however, the clients who used MMP belonged to many different condition categories as their reason for disability. As expected, the largest group of clients had musculoskeletal system disease group as their primary reason for disability, followed by those with mental disorders.

⁷ Adjust GlobalApp Trends 2019 Global Benchmarks Report (Retrieved April 2020). [Website link](#)

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By having access to my clients' regularly-tracked pain and function through Manage My Pain, I am able to establish a trusted relationship with my clients and support them in their return-to-work plan. This information allows me to easily follow-up on their progress and offer non-traditional solutions.

Don Lee, LEAD DISABILITY CLAIMS SPECIALIST, RBC INSURANCE

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Living With, and Managing, Chronic Pain



A Client's Story

One disability client included who benefited from **Manage My Pain** worked in a labour-intensive occupation. They started their disability benefits due to debilitating and worsening lower back pain.

The client tried multiple solutions, ranging from chiropractic interventions to various medications, but they had found those to be largely ineffective in managing their pain. Following a meeting with their primary caregiver, the client was sent for an MRI. Following this, back surgery was recommended and scheduled. Major back surgery can add 6 to 12 months to a claim – in many cases, more.

Two months prior to the client's scheduled surgery, their case manager recommended that they use Manage My Pain. Within two

months of being introduced to it, the client's benefits ended and they went back to work in a modified manner.

Using Manage My Pain, the client was able to self-manage their pain by identifying triggers and alleviating factors. They used Manage My Pain to generate reports which they shared with their surgeon prior to surgery. Using the reports, the client's surgeon concluded that the client's pain management was improving, and that surgery was not needed.

Using the same data, the rehab team and case manager worked with the plan sponsor to develop an accommodating return-to-work plan.

Building on Success

Manage My Pain is a digital solution that has an unprecedented ability to engage people with chronic pain. When used with clients with disabilities, it empowers them to self-manage and better communicate with their care teams. Case managers use the information captured by MMP to support their clients on their return-to-work path. Ultimately, this results in improved claims experiences and shorter claims durations.

The global chronic pain treatment market is expected to continue to grow steadily in the coming years, largely fueled by the rising cases of musculoskeletal issues and the aging population.⁸

As understanding of chronic pain evolves, it is becoming clearer that earlier intervention is needed to mitigate more severe impact and costs downstream. There is a significant opportunity to help clients self-manage their chronic pain and communicate with their care-teams before their situation devolves into a debilitating condition. With chronic pain continuing to be a leading reason for disability, digital innovations such as MMP can be one way that disability carriers can help people avoid becoming clients with disabilities in the first place.



Manage My Pain has rapidly become an integral part of our claims innovation agenda. It allows us to better support our clients and their return-to-work plans with effective rehabilitative and assistive services, which ultimately helps us reduce claim durations.

Tanya Sinha, DIRECTOR, GROUP DISABILITY CLAIMS, RBC INSURANCE



⁸ Chronic Pain Treatment Market Research Report - Global Industry Analysis and Growth Forecast to 2030. Prescient & Strategic Intelligence (Retrieved October 2020). [Website link](#)

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If you would like to learn more, please send us an email at **contact@managinglife.com**



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