Reducing Disability: Psychosocial Determinants Influencing Recovery (PDIR)

Table of Contents

Summary Information 2
- Psychosocial Determinants of Recovery Overview
- Common PDIR presentations
- Common PDIR Interventions

Clinical Resources 3
- PDIR Screening and Intervention Algorithms
- Key Recovery Messages

Concept, Discussion and Assessment 7
- Psychosocial Determinants Concepts
- Psychosocial and PDIR Assessment
- PDIR Screening Scales

Functional Recovery Interventions 12
- Options for Providers
- Summaries by Specific Risk Factor
- Assessment and Responses summary

PDIR Interventions Evidence Summaries 16
- AP-Provided PDIR Interventions
- Specialist-Provided PDIR Interventions
- Specialist-Provided Mental Health Interventions

Additional Materials 31
- PDIR Terminology Glossary
- Functional Recovery Questionnaire
- Validated PDIR Scales Summary Table
- Support Systems Assessment and Conversations
- Managing Hostility, Anger, Disruptive Behavior
- Addressing Signs for Self-Harm/Suicide
- Interpersonal Conflict Management and Resolution
- PDIR and MH Screening and Tracking Scales
- Evidence and Methodology
- Citations

Purpose and Intended Use

This resource focuses on routine screening and methods to address psychosocial determinants influencing recovery (PDIR). PDIR includes normal reactions to, and behavioral factors associated with work injuries that can affect recovery. Many factors contribute to their development including individual distress tolerance and coping skills. These are highly variable and affect workers differently.

Dedicated PDIR interventions are not needed in most cases, but routine PDIR screening is important to identify those at increased risk of delayed recovery. There are a number of validated screening tools and intervention options for PDIR. Patient and provider interventions also factor in, thus precluding a 'one-size-fits-all' approach. This resource assists in recognizing the "when's and how's" of impacts PDIR may have on recovery.

This resource was jointly developed by the Industrial Insurance Chiropractic and Medical Advisory Committees (IICAC & IIMAC) and the Washington State Department of Labor and Industries (L&I). In addition to helpful evidence-based clinical strategies, it includes a synthesis of published literature regarding biopsychosocial factors that commonly impact recovery from work injuries. This practice resource does not change L&I coverage or payment policy. This and other practice resources are in the public domain and are available for download at the L&I website under Treatment Guidelines and Resources.

Continuing Medical Education credits (3 CME/CEU) are available for this resource.

Practical Application Points

- Psychosocial issues affect everyone, to varying degrees.
- Routine assessment of ability to cope with psychosocial issues informs screening and care planning.
- PDIR reflects best patient management practices and is easily incorporated into practice.
- Incorporation of PDIR strategies identifies, and offers timely intervention options, for psychosocial issues known to increase disability risk.

Psychosocial Determinants Influencing Recovery (PDIR)

PDIR include factors that impact how people deal with difficult situations (e.g., attitudes, beliefs, education, habits, and supports). Individual circumstances and capacity determine how these may facilitate or impede recovery. Most people have adequate coping skills for normal recovery. PDIR become critical when progress is less than expected, a worker's coping capacity is impaired, or external factors become overwhelming (e.g., job loss). Most providers can identify and manage PDIR themselves as part of routine "good doctoring." Enhanced support (e.g., activity coaching, behavioral health assistance, vocational recovery) is available when additional services are needed.

PDIR versus Mental Health/Psychological conditions

Mental health conditions (reflected by a psychological diagnosis), are rarely accepted as work related and are managed differently in workers' compensation. In order for a psychological condition to be accepted on a claim, a claims manager-approved mental health evaluation and formal adjudicative process is required. In some cases, a pre-existing mental health condition is a barrier to recovery and temporary psychological/psychiatric treatment may be authorized. Common symptoms (e.g., mild/moderate depression, anxiety) do not meet psychological diagnostic criteria and can be addressed as PDIR without a mental health diagnosis.

Common PDIR and Presentations

The majority of workers recover fully without dedicated attention to PDIR. However, when PDIR are identified, it is important to ensure that AP care incorporates recovery interventions.

Common PDIR	
Recovery expectations	Fear of activity
Catastrophic thinking	Deactivation
Perceived injustice	Loss of vocational connection

More specific PDIR and MH assessment scales should be considered to identify underlying factors for those patients with positive screening scales and/or less than expected improvement, *especially those who do not return to work within a couple of weeks*.

Common PDIR Interventions – see bookmarks for details

Addressed by attending provider (AP)

- Motivational interviewing
- Physical activation
- Patient education
- Self-efficacy
- Pain coping
- Support systems
- Relaxation
- Sleep habits

Addressed by specialist providers

- Vocational recovery
- Activity coaching
- Targeted Brief Behavioral Health Interventions

Skill, capacity, and interest of APs to address PDIR varies; some may require support or specialty triage for complex cases. Community resources for addressing PDIR also vary. No single type of facility or provider type is the only source for PDIR interventions; however, the field is rapidly evolving to include vocational recovery assistance, activity coaching, and behavioral health available as specialist-provided options.

PDIR Screening and Intervention

Routine psychosocial history and assessment is standard of care for most any provider or specialty. Contemporary thinking and an increasing evidence-base recognizes a significant role that psychosocial factors play in health and well-being. Competent clinical interviewing and counseling can be enhanced by specific approaches and tools that are particularly useful for providers choosing to treat workers. The vast majority of workers will recover fully without special attention to chronicity or psychosocial risk factors.[1, 2] The screening algorithm on page 4 illustrates an easily implementable, straightforward approach for any provider to help rule-in or rule-out workers who may need dedicated attention to PDIR. The second workflow on page 5 covers attending provider administered PDIR care and/or triaging to resources and specialty services beyond the AP's skill set.

Whenever the impact of psychosocial issues exceeds a worker's ability to cope, "care as usual" may not be enough. Initially, straightforward and conservative approaches for the worker's injury should be considered. Determining response to care should be informed by an individual patient's situation, attitudes and needs (perhaps even more so than trying to gauge progress over weeks or months). Revisiting and reinforcing these PDIR factors (e.g., recovery expectations, activity avoidance) is critical with the small number of at-risk patients. More complex or severe patients may best be referred to programs or specialists (e.g. behavioral health, activity coaching). Specialists would typically provide behavioral health interventions such as cognitive behavioral approaches for maladaptive behaviors.

As an overview, the screening should inform your care planning and interventions in order to reduce the likelihood of disability. Active self-care enhanced by appropriate exercise has been shown to facilitate the earliest possible safe return to work and provide the best outcomes. Some key messages and interventions to consider are:

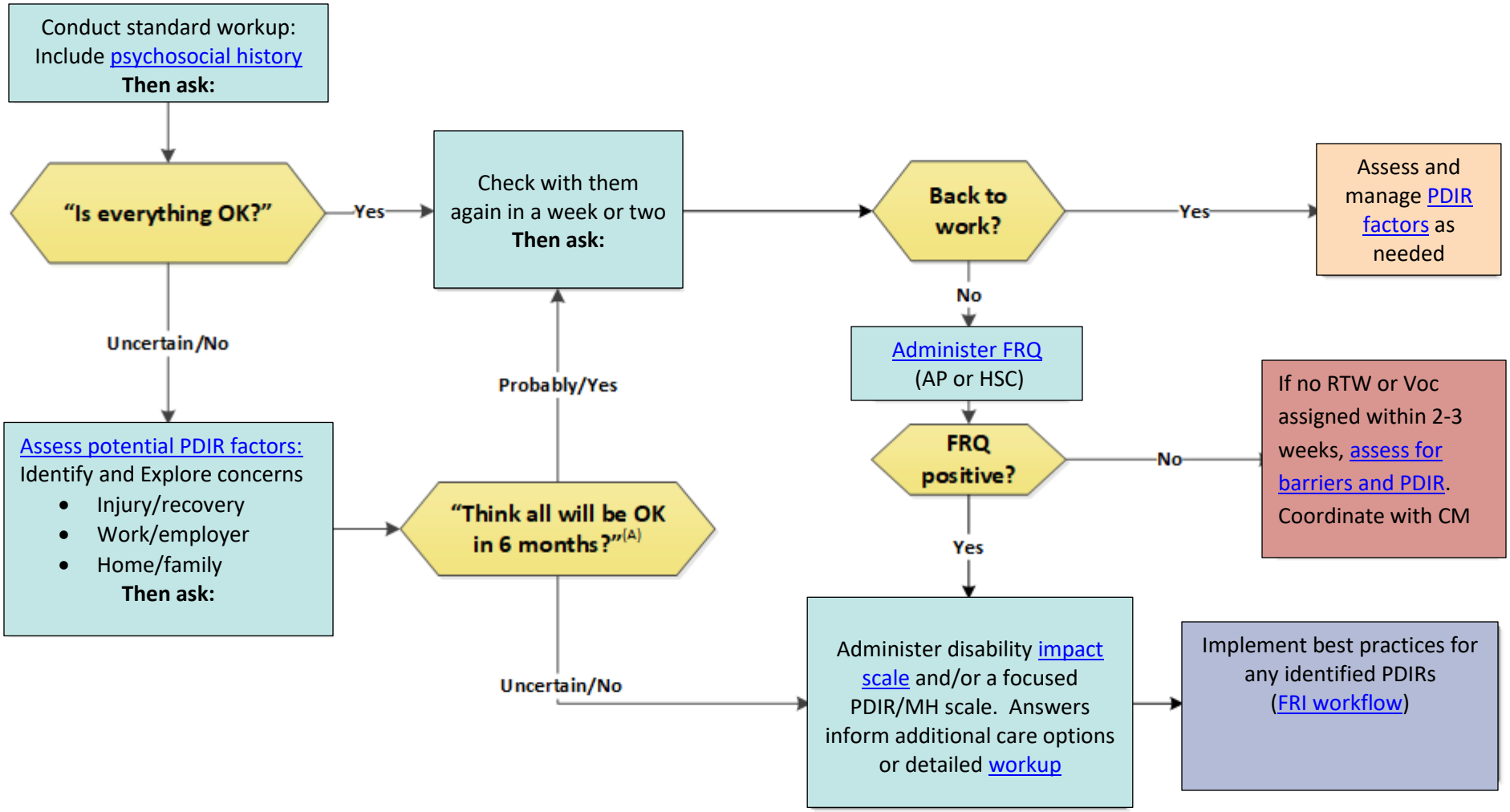
- Frequently address recovery expectations (e.g., What is important to them about returning to work)
- Reinforce important recovery habits (e.g., regularly review their activity diary with them)
- Talk about any concerns they have about pain or re-injury and avoidance of physical activity.
- Reiterate self-management tips like pain coping strategies and optimal sleep habits.
- Encourage physical activity progress at home (e.g., emphasize and negotiate regarding small incremental steps such as a just few extra steps or minutes every day)
- Prescribe active rehabilitation and discuss functional gains (e.g., negotiate incrementally increasing activities important to them – an attitude about achieving small functional gains despite discomfort yields long-term benefit)
- Identify any return to work barriers quickly (within the first 2-3 weeks if time loss is certified).
- Consider patient factors like motivation ('Getting Back to Work' flyer) and workplace factors such as task modification. Obtain support from activity coaching, vocational recovery staff, or behavioral health caregivers if attending provider treatment is not achieving desired outcomes.
- Communicate with others for effective treatment planning (e.g., case conference with other care team members, the employer and/or family members to facilitate consistent messaging)

Practical Application Points

- Early identification of psychosocial issues that negatively influence recovery is important to prevent disability.
- Identifying PDIR issues not only helps you address important factors to speed your patient's recovery, but can help determine appropriate L&I resources to address problems more efficiently and effectively.

Routine Screening for Psychosocial Determinants Influencing Recovery (PDIR)

For workers newly off work due to non-catastrophic musculoskeletal injury



Definitions

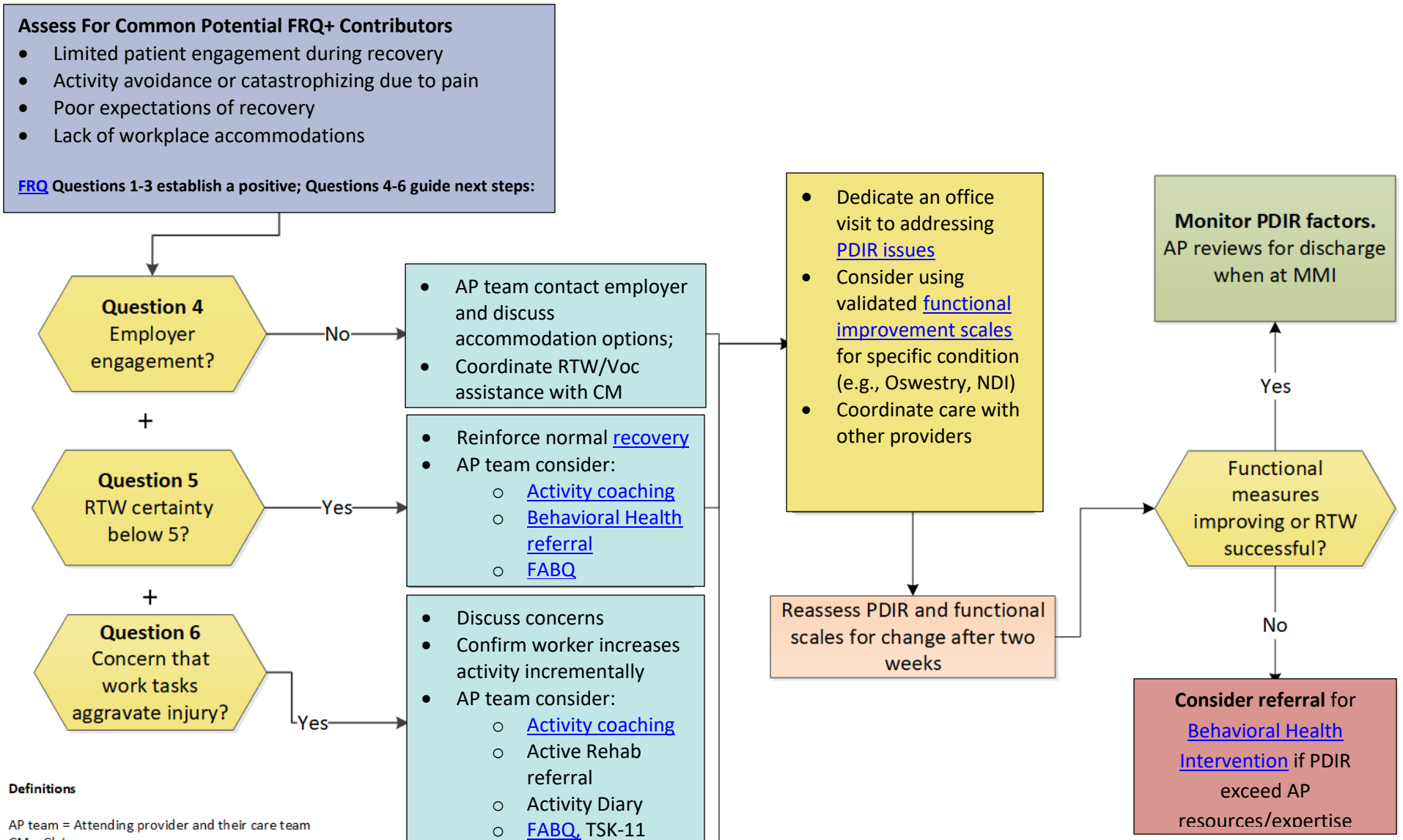
FRQ = Functional Recovery Questionnaire
FRI = Functional Recovery Interventions
RTW = Return To Work
PDIR = Psychosocial Determinants Influencing Recovery
CM = Claim Manager
HSC = Health Services Coordinator
Voc = Vocational Counselor

Annotations

(A) Watch for suicide warning signs such as mentioning self-harm, death or suicide (including method). More information see suicide management

Workflow for Functional Recovery Interventions (FRI)

For worker with non-catastrophic musculoskeletal injury and positive FRQ.



Definitions

AP team = Attending provider and their care team
CM = Claim manager
FABQ, NDI, TSK-11, Oswestry = PDIR screening/tracking scales (see appendix)
FRQ = Functional Recovery Questionnaire
RTW = Return To Work
PDIR = Psychosocial Determinants Influencing Recovery
Voc = Vocational Rehabilitation Counselor

Key Recovery Messages for Clinicians to Convey (including online resources for patients)

Messages such as these are part of usual good care and can be beneficial for any patient, but may be especially critical for workers with psychosocial issues. An extra level of education and reinforcement of these concepts may be required to prevent disability or chronicity for these at-risk workers.

About Pain – read more about pain coping

- Pain or discomfort does not mean your body is being injured. Examples:
  - Putting a jalapeño on your tongue or exercising a body part enough for a muscle to start to hurt.
- The goal is improved functioning, not just pain level reduction.
  - Ask about how pain interference with activities, not how much pain they are in.
  - Engage the patient in any ideas they have for carrying on with daily life while they have pain.
  - Gauge confidence in their ability to do a particular activity and support them.
- Acute and Chronic pain are different: Pain explanation video for patients can be found here: link
  - New or sudden pain may signify tissue injury, but chronic pain is no longer a protective mechanism.
  - Once the injury has healed, the pain is not related to tissue damage, but the behavior of pain must be retrained over time.
- For more conversations regarding pain neuroscience education, including patient resources look at:
  - www.tamethebeast.org – Free patient and provider resource by Dr. Lorimer Moseley and David Moen.
  - Recovery strategies – Free workbook by Dr. Greg Lehman

Returning to work – read more about vocational counseling

- Return to work is one of the goals of treatment. (Communicate this early and that you will work with their employer and other providers to assure this is done safely.)
- The longer you are off work, the harder it is to get back to your original job and wages.

Taking Small Steps – read more about goal setting

- The most successful and sustainable gains start small and build over time.
- Recovery takes time and requires follow-through on your part, but you can do it.
- There is no shortcut for the healing process. No elevator to the top; you have to take the stairs, metaphorically.

Staying Active - read more about activation

- Activity is necessary for recovery
  - You should try to resume all your normal activities as soon as you can. This will help your body recover faster.
  - Even the easiest activity can speed recovery (walking, getting up and down, gently moving the injured part).
  - It is your responsibility and my expectation that you follow activity recommendations both at home and at work.
- Do just a little bit more each day
  - An extra 5 minutes; an extra 10 steps; lift a few extra pounds.
  - Set daily goals to reach (a weekly activity diary is helpful for this).
  - Focus on doing your normal routine and activities that are important to you.

Normal Recovery – read more about education

- Almost all musculoskeletal problems will heal well. Flare-ups do not mean you are going backwards.
- Only you can ensure your own successful recovery. Your providers do not “cure” you; They help you optimize your internal and external environments so you can recover.
- Doing something early is much more effective than doing the perfect thing down the road.
- To get well, you must think, feel, and act differently.

Dealing with Stress - read more about relaxation

- Everybody has stress – it’s normal. Learning to handle stress and bounce back from difficult situations matters the most.
- There are many effective ways to relax your body and cope with emotions or negative thoughts.

Enhancing Sleep – read more about sleep habits

- You can improve your pain and sleep without medication.
  - Have a consistent bedtime routine. Think about things you like to do or want to dream about before going to sleep.
  - During the hour before bedtime, do a relaxing activity (play cards, read or watch something other than the news, listen to music).
  - Doing some aerobic exercise earlier in the day (including walking) helps improve sleep.

Psychosocial Determinants Influencing Recovery (PDIR) Concepts

Psychosocial Determinants Influencing Recovery (PDIR) encompass non-pathoanatomic factors intrinsic to someone with a work injury. When a worker becomes injured on the job, they will likely have concurrent physiological, medical, psychological, and social considerations that may affect their recovery from that injury. The individual needs of a worker and their circumstances should guide care delivery. However, workers' compensation benefits are essentially constrained to treatment for the accepted work-related condition and not pre-existing or concurrent conditions that did not arise from the occupational exposure. This can be a challenging shift in delivery of care for some providers. For example, a severe cardiovascular disease may impact the speed of tissue healing in an ankle sprain, but it is unlikely that the workers' compensation system would cover cardiac bypass surgery in the treatment of an ankle sprain. The best approach to PDIR may be to conceptualize them as psychosocial corollaries to physical "*findings*" with a clinical diagnosis. For example, some workers with a low back strain have significant muscle tightness while others have very little. Typically, these individual physical findings don't require additional diagnoses, though they influence findings and recovery expectations, as do psychosocial components.

Empowering a worker's ability to affect their pain and recovery helps reduces the impact behavioral factors have on delayed recovery and development of chronicity. Additionally, "over-medicalizing" of mental health conditions during recovery has potential to stigmatize and encourage reliance on approaches that may not be as curative or rehabilitative as possible. Emerging research and clinical best practices suggest that the best way to address these psychosocial factors is to prevent a scenario of worsening symptoms by early identification and action.

Everyone experiences stress and has life challenges to cope with. A 1999 Surgeon General's report estimated that only 17% of the US population is in a state of "optimum" mental health.[3] The likelihood is high that some workers' psychosocial states may warrant attention during recovery, based on their individual situation and coping skills.

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Workers' Compensation Perspective of Injury

Worker's Perspective of Injury

Biopsychosocioeconomic (BPSE) aspects involved in a work injury reflect the biological, psychological, and socio-economic factors that may facilitate or impede recovery. BPSE factors contribute to potential barriers, as well as concurrent mental health (MH) conditions (e.g., anxiety or depression). When combined with a debilitating injury, BPSE factors may become more significant and influence recovery, and at that point, they must be addressed.

- ***Biological:*** the patient's pathophysiology as well as their overall constitution. This is what providers conventionally focus on when caring for a worker.
- ***Psychological:*** the daily stresses of life and injury that include perceptions, emotions, behaviors, attitudes, and coping abilities. These commonly impact recovery.
- ***Socioeconomic:*** the environmental, cultural, and economic considerations that can contribute either stress or support to the patient's recovery. Family, co-worker & provider attitudes, time, logistical issues, and financial obligations are examples.

Basic PDIR Concepts

Although overlap exists, distinguishing between PDIR and MH conditions facilitates providing occupational healthcare. It is helpful to frame challenges posed by concurrent, pre-existing mental health conditions in a manner similar to conditions like obesity. Deconditioning or obesity are unlikely to become an accepted occupational condition for which a gym membership or purchasing of healthy low calorie food would be approved treatment. For example, DSM-5 makes an important distinction between normal responses to stress and actual mental illness.

> **Normative stress reactions.** When bad things happen, most people get upset. This is not an adjustment disorder. The diagnosis should only be made when the magnitude of the distress (e.g., alterations in mood, anxiety, or conduct) exceeds what would normally be expected (which may vary in different cultures) or when the adverse event precipitates functional impairment." (DSM-5, p. 289)

Practical Application Points

- When not coping well, psychosocial issues become Psychosocial Determinants Influencing Recovery (PDIR) and are important to address as a component of the accepted work-related condition, but are distinct from mental health conditions.
- Pre-existing mental health conditions may be best addressed as part of one's general health care, or in some instances as a temporary barrier to injury recovery.

PDIR: Distinct From Mental Health Conditions

Although good for a worker, and potentially beneficial to recovery, such interventions are typically the patient's obligation. In situations where a time-limited, specific goal-focused intervention may help improve a barrier to recovery for a work-related condition, behavioral health intervention may be an option. Although it would not be accepted directly as work-related, short term interventions for care under their general health plan, or obtaining pre-authorization for temporary treatment as a barrier to recovery may be appropriate.

Mental health (MH) conditions can present with similar scenarios to psychosocial issues. Except for a workplace exposure resulting in an accepted diagnosis such as post-traumatic stress disorder (PTSD), a psychiatric or psychological diagnosis is not commonly accepted as a work-related condition from a typical musculoskeletal injury. As an attending provider, if you do suspect a concurrent mental health condition, consider requesting authorization from the claim manager for a mental health evaluation. In order for a mental health condition to be accepted as part of a claim, it requires a formal adjudicative process to add a diagnosis of mental illness. In Washington State, there are specific legal limits on the acceptance of mental conditions caused by stress. (RCW 51.08.142; WAC 296-14-300).

Documenting Psychosocial factors

How PDIR are documented can have an impact on interpretation of the differences between psychosocial issues and diagnosable mental health conditions. For example, writing "the worker is depressed" versus "shows symptoms of depression" or "is feeling discouraged" have different connotations for a claim manager or an employer. The former may trigger an adjudicative review for adding a contended mental health diagnosis. Phrases like "Trouble rising in AM limits ability to engage in PT" are preferred for psychosocial issues versus "patient non-compliant with PT" that can create unnecessary adversity. The first phrase documents an influential factor on recovery that could be addressed to improve outcomes. While the latter might instigate a review for non-cooperation and potential increased claim friction (e.g., employer protest, premature claim closure). When psychosocial factors and not diagnosable mental health conditions are truly the problem, consider these tips:

Instead of broad statements or a potential diagnosis…	Consider specific examples or behaviors influencing recovery…
worker is depressed	worker is feeling discouraged
patient is non-compliant with PT	trouble rising in AM limits ability to engage in PT
hates her job	expresses concern that job is unsatisfying

Psychosocial and PDIR Assessment Best Practices

The psychosocial assessment provides an overview of the person's well-being. This assessment guides the provider's understanding of a person to help inform the best care options. At its most rudimentary, psychosocial assessment should determine a person's mental health status from their own perspective and that of their family and/or social network. At its best, it should identify with some granularity the degree to which an individual is successfully coping with their life circumstances and challenges. From the standpoint of recovery from a work-related condition, priority should be given to identification of life issues and the person's coping responses that are likely to support or impede their recovery, emphasizing elements that may be related to risk of chronicity and delayed recovery. The completeness of the initial psychosocial history not only optimizes clinical decision-making, but can help head off potential claim problems. The actions and choices made by a worker, for better or worse, have greater impact on recovery outcomes than those of any other stakeholder. It is of critical importance to assess current coping behaviors and encourage behaviors which support rapid and full recovery, as well as reassess them regularly for new developments and changes.

PDIR History

Intake, Screening & Triage:

As part of the routine psychosocial history, start with how the patient is thinking about their new injury and how it is impacting their life.

Ask the worker:

- *What do you think you will need to be able to return to your job?*
- *What is important to you about getting back to work?*
- *Has your employer contacted you since your injury?*
- *What support do you have at home while you recover?*
- *What was helpful in the past when dealing with issues like this?*

Practical Application Points

- Determine the impact the work injury has on the patient's life and their ability to cope with it
- Identify the patient's support system at home if injury precludes returning to normal work within a week or so.

Recovery and rehabilitation from an injury is not a static process. The number and intensity of PDIR addressed can change over time. Deviation from an expected recovery trajectory may change or exacerbate PDIR. The workflows at the beginning of the document indicate that ongoing attention to PDIR, and the patient's coping abilities, should be periodically revisited, particularly if return to work does not occur or is not sustainable. Prompt identification of PDIR, changes in them, and the worker's coping abilities is critical for reducing risk of chronicity

Additional Psychosocial History Elements

At a minimum, a psychosocial history on workers should include the following elements for flagging potential contributors to recovery:

- **Coping Skills Assessment -** Coping skills and ability is important to assess in all individuals as it has impacts on overall recovery. Screening tools such as Brief-COPE or a resilience scale can identify areas to focus on. Unstructured approach asking open-ended questions about worker coping strategies can be useful. What helps you deal with stressors? What are some strategies you use when coping? What has been helpful so far?
- **Relationship/Family History** – Determine the types and level of support or stressors that exist at home.
    - Are family members available to assist with home care and encouragement for the worker to attend to recovery?
    - What obligations does the worker have to tend to (e.g., child or elder care)?
    - Assess marital / intimate relationship status and satisfaction with it.
- **Educational/Occupational History** – Determine satisfaction with career, work tasks and environment; relationship with employer and coworkers.
- **Emotional/Social/Spiritual History** – What is the workers general state of mind, activities and interests? Can serve as motivation for recovery.
    - What activities do they like to engage in outside of work?

- What is their circle of friends like and how often do they engage in desirable activities?
- Spiritual and religious beliefs can be important to many people, and an understanding of a patient's state of mind may help focus approaches for cognitive behavioral interventions.[4]

- **Sleep habits** - Ask about sleep hygiene (hours per night, how long it takes to get to sleep, what they do prior to bedtime).
- **Substance Use** – Alcohol, smoking, and drug use should be addressed including substances, amounts, and frequency.
- **Psychological/Psychiatric History** – Is there a history of any mental illnesses/treatment for depression or anxiety? Ask about family members.
- **Suicidal Ideation** – Are there any warning signs regarding self-harm, discussion of death or suicide, or seeking pills, weapons, or means for suicide?

A key aim of this part of the history is to assess an individual's ability to cope with everything they have to deal with on top of their new work injury. If they come across with a good coping capacity, management as usual is recommended. If PDIR barriers are identified, care strategies should adapt quickly before PDIR accumulate or escalate. Although condition severity is a factor, studies of disability demonstrate that the majority of long-term disability is associated with non-catastrophic injuries.[5-7] Routine assessment should determine:

- Volume of tasks and obligations to be dealt with during recovery,
- Attitudes and expectations regarding care and recovery,
- Perceived stress levels,
- Available support from friends, family, and coworkers.

Comprehensive Psychosocial History Elements

After noting psychosocial elements identified above, simply ask: "Do you think everything is going to be OK?" If so, continue with care as usual and simply monitor for any PDIR concerns that emerge. If the worker has concerns or displays uncertainty (pay attention to body language), consider having the worker also complete a basic psychosocial screening scale (e.g., WHODAS 2.0) or a more targeted scale (e.g., PHQ-9, GAD-7) Validated scales summarized in this section should be used if the information gained is likely to influence care decisions.

It is important to routinely assess and monitor for potential ***psychosocial determinants influencing recovery*** **(PDIR)** as contributors to stalled progress. Prepare to track how identified or potential PDIR may change over time. Use information from this history to revisit PDIR in your care plan, particularly if recovery does not proceed as expected for the clinical condition.

Additional areas typical of thorough and specialist evaluation are summarized below. Various screening instruments are available that address these areas, and may be worth exploring when issues are identified from a psychosocial history.

- **Violence Risk Assessment** – Concerns that arise about a worker's safety (at home or in the workplace) may warrant deeper assessment of such risks. A variety of tools are available for basic screening and triage and might be as simple as inquiring if they feel safe.[8] The US Centers for Disease Control have developed a website for nursing that offers straightforward screeners for violence risk that may be applicable in other settings.
- **Cultural Assessment** – Perceived or actual racial discrimination or cultural oppression may interfere with trust building and influence a worker's ability to interact well with the industrial insurance system. Significant differences in pain experience exist across different cultures.[9] An understanding of cultural contributors may inform which intervention options, CBT strategies, and self-efficacy approaches may be most useful.

- **Financial Assessment** – Although not often addressed in a clinical setting, economic stress and obligations can contribute to a patient's emotional state and recovery. It can be a motivator for return to work, or an obstacle to maintaining optimism for recovery. Referring a patient to resources that can help guide them through such issues may useful.

Sample Questions & Interviewing Approaches Regarding Psychosocial Factors

- "Tell me a little about how things are going for you outside of work..."
- "It would be helpful to know a little background about your spouse and children. Tell me about them..."
- "Have you or anyone in your family ever had concerns about how much you drink, etc.?"
- "We all have to deal with a lot of stress in life. How is yours and what do you do to handle it?"
- "Have you ever talked to or wanted to talk to a psychologist or counselor about anything? How did it go?"

PDIR and MH Screening and Tracking Scales

Numerous validated psychosocial and mental health scales are available for screening and tracking progress of various PDIR and MH conditions. Scales have been used in research and clinical settings for screening, diagnosing, and monitoring progress. They may help inform care planning and triage decisions as well as track progress where a given issue is prominent. However, unless the information gleaned from such scales meaningfully measures clinical progress, or assists in making care plans (e.g., specialty referral, a change in planned treatment) routine utilization of lengthy or detailed scales is not warranted. A summary table of commonly used scales is included in this table and a more comprehensive listing with descriptions and links is located in the additional materials section.

In those people who appear to be handling everything OK, but potential psychosocial issues were identified, it is recommended to pay close attention on follow-up visits to how they are coping. If there is difficulty getting back to work within a week or two, it is recommended that a disability risk questionnaire (Functional Recovery Questionnaire – FRQ) be administered.[2, 10] When given in the first few weeks of injury, the first three questions in FRQ identify the risk of being disabled one year after their injury. The second three questions indicate the workers understanding of accommodation at work, their recovery expectations, and fear of activity. This can give a provider the opportunity to discuss reasons the worker's health problems are so concerning, explore high-scoring items and use PDIR functional recovery interventions. If the attending providers resources/expertise are not enough, consider referral options for PDIR. The FRQ is currently being utilized within the state's Centers of Occupational Health and Education (COHE) and health services coordinators will be administering these to workers who qualify. Please consider sharing FRQ results with your referral to a behavioral health specialist to help guide their treatment focus.

Practical Application

- Recovery is a dynamic process. The number and intensity of PDIR may change over time
- Deviation from an expected recovery trajectory may change or exacerbate PDIR.
- Revisit psychosocial factors if return to work stalls or is not sustainable.
- Keep in mind additional PDIR Care Planning resources are available here.

Functional Recovery Intervention Options for PDIR

It is essential for attending providers to engage patients in their own recovery. While most workers have psychosocial factors that can impact their recovery, they also possess the coping strategies to manage without additional interventions. Addressing PDIR when present is sensible for all patients, but it is ***especially important*** for workers who have low expectations of recovery, avoid essential recovery activities, magnify their symptoms/situation, or feel a sense of injustice. Providers need to recognize and respond quickly to workers who are overwhelmed and may have limited coping skills. Most PDIR interventions should be within most attending providers' comfort zone and expertise for straightforward situations, although the degree to which each AP intervenes with PDIR can depend on their practice setting, experience and availability of an AP-care team that may include behavioral health providers. Typical approaches to address specific PDIR are outlined in the next few pages and are billable as part of a routine office visit in an evaluation & management code. Each AP-care team provided and Additional Support PDIR Option is expanded on including supporting literature in the evidence summary section.

For more complex patients whose complexity of PDIR exceed an AP's capacity, referral to a specialist that can provide greater expertise and focus to address PDIR may be appropriate. It is important to observe that PDIR interventions should not stop people from working or retraining. The interventions should overcome these barriers and help create accommodations to sustain work, which is associated with positive recovery outcomes. The table below outlines the most common PDIR approaches including those provided by AP-care teams as well as additional support options that are available to Washington State providers. While many of these interventions are considered "good doctoring", there may be some specific techniques and approaches that can offer avenues for provider growth to give extra attention and reinforcement when PDIR are present.

AP-care team Provided PDIR Options*

- Motivational Interviewing
- Physical Activation
  - Activity Diary
  - Rehabilitation / Exercise
- Patient Education & Key Recovery Messages
  - Positive workplace connection
  - Understanding their injury and pain
  - Overcoming unrealistic fear
  - Pacing oneself
  - Problem solving
  - Goal setting
  - Coping with emotions / mindfulness
- Self-Efficacy enhancement
- Pain Coping (tailored to patient)
- Support System engagement
  - Patient obligations (time, finances, child care, etc.)
  - Support resources (personal, community)
- Relaxation Training and Techniques
- Sleep Habits & Management

* Straightforward consultation / counseling in these areas may be within AP's capabilities and skill sets. Alternatively may be addressed by referral for more intense specialist-provided PDIR approaches/brief interventions externally or in their care team.

Additional Support PDIR Options

- Vocational Recovery and Rehabilitation
- Activity Coaching
- Targeted Brief Behavioral Health Interventions
  - Emotion/Behavior Management
  - Cognitive Behavioral Training
  - Motivational Interviewing & Goal setting
  - Solution focused approaches
  - Distress tolerance
  - Resilience training
  - Mindfulness stress reduction

Specialist-Provided Mental Health Treatment Options

- Cognitive Behavioral Therapy
- Structured Chronic Pain Programs (SIMP)
- Substance Abuse Treatment
- Other Psychotherapy modalities

Medication Management (AP-provided or Psychiatrist)

- Opioids
- Psychotropics
- Sleep Medications

Functional Recovery Intervention Options by Specific Risk Factors

This section summarizes the common situations where psychosocial determinants influence a person's recovery and which intervention options may be worth consideration. Typically, the AP's direct care can handle most PDIR by utilization of key recovery messages and additional office visit time. Referral and coordination with an experienced provider for brief psychosocial interventions may be an appropriate alternative if AP care is not enough. A referral for a mental health specialist's care may be appropriate only when mental health conditions affect recovery.

Activity Avoidance & Unreasonable Fear of Worsening:

If you see: lack of engagement in physical rehab, fear of worsening injury with activity, unexpected return to work delays, unwillingness to move past light duty, thoughts and comments regarding worst-case outcomes that are often irrational or magnifying.

Attending Provider actions:

- Ask which specific work activities are of concern and what modifications would enable participation.
- Negotiate daily activities they could do and incrementally increase them each day. (Activity Diary)
- Consider a questionnaire to assess magnitude if particularly intense or behavior has prolonged persistence.

Additional support resources:

- Time-limited physical rehabilitation (PT/OT/DC) that includes active care and graded exercise with specific functional improvement goals.
- Activity Coaching to help return to routines, set goals and enhance return to work.
- For particularly high magnitude interference or questionnaire scores, work-focused behavioral health referral may be appropriate.

Low Recovery Expectations:

If you see: disengagement with care, missed appointments, lack of self-efficacy or motivation, expressions like "Will this ever get better?" or "I don't think I will ever be able to (activity) again"

Attending Provider actions:

- Reassurance about effective care options and recovery mindset.
- Re-engage patient in shared decision making regarding treatment plan.
- Reinforce positive gains and capability with small steps in goal setting.

Additional support resources:

- Group activity and connection with recovering peers (work hardening, group exercise or counseling)
- Call and discuss progressive activity with physical rehabilitation (PT/OT/DC) provider
- Activity Coaching or structured program focusing on functional improvement if progress stalls, including many free apps for activity diaries.

Employer-related issues:

If you see: disengagement with RTW, missed vocational appointments, unnecessary delay on follow-through with employer

Attending Provider actions:

- Day 1: communicate with employer if work will be missed due to injury, especially if modified duty is needed.
- If employer expresses any resistance or inability to accommodate, mention that L&I may have programs to help pay for bringing someone back to work. Contact claim manager regarding return to work assistance – Vocational counselor, account manager or other RTW options.

- Set expectation early that return to work in any capacity or role is part of a successful clinical outcome.
- Identify and document worker's concerns (conflict in the work place, not honoring restrictions, peer pressure) and explore options to address them.

Additional support resources:

- Health Services Coordinators in a COHE, Vocational counselors or contact claim manager for other L&I RTW resources.
- For significant interpersonal conflict, behavioral health intervention like conflict resolution counseling may be appropriate.

Family / support system issues:

If you see: complaints of burden worker has put on family, lack of social support system, increased family/household difficulties

Attending Provider actions:

- If recovery is not progressing as expected, engage family or friends to align support with patient goals (e.g., compliance with homework, activity).
- Schedule a brief office visit for counseling with the patient and close friend or family member to gain insight into the worker's efforts outside the office and enlist their support and encouragement with the recovery plan.

Additional support resources:

- Referral for brief psychosocial interventions (e.g., activity coaching, counseling sessions with behavioral health (psychologists, other providers).

Inadequate understanding or expectations of diagnostic and treatment options:

If you see: Unrealistic expectations of recovery, disengagement with conservative care, repeated requests for additional diagnostic tests.

Attending Provider actions:

- Use 'teach back' to clarify patients understanding of diagnostic and treatment plans (ask them to explain what their care plan is)
- Discuss utility and limitations of diagnostic tools (e.g. MRI is only helpful under specific circumstances and can start you down a wrong path).
- Determine if there are unfounded expectations of particular treatments and address them (e.g., surgery is only effective for certain causes of back pain, side effects of some medications are more problematic than any benefit they offer, overestimation of curative effects of a treatment).

Additional support resources:

- Second opinion with L&I-trained consultant (Chiropractic consultant program) or other providers (medical, dental, etc) on Find a Doctor.
- Refer to L&I Condition and Treatment Index for policies and coverage decisions

Inadequate understanding or expectations about the industrial insurance process:

If you see: Frustration with adjudication, discussion of needing legal assistance, unreasonable delays. Pay attention to body language and non-verbal expressions

Attending Provider actions:

- Encourage written communication with claim manager and re-assure consistent documentation in patient's chart.
- Refer for support resource such as Project Help.

Additional support resources:

- Outreach to claim manager or Health Services Coordinator

Psychosocial Determinants Influencing Recovery — Assessment and Responses

Washington State Department of Labor & Industries

When assessing psychosocial determinants influencing recovery (PDIR), this timetable can help triage risk factors for delayed recovery and potential responses in the critical first two months of disability prevention. Across all timeframes, regularly reinforce messages of normal recovery.

Discuss Worker's Psychosocial History

- Inventory personal stressors and obligations (e.g., family, health, financial, child/elder care).
- Note nature of work place relationships (e.g., supervisors, co-workers, job/career satisfaction).

Assess Worker's Coping Ability

- How does work injury and social support network affect ability to handle issues in psychosocial history?
- If a lot is going on, ask the worker if they think everything will be OK in a few weeks or months.

Potential Further PDIR Screening

- Consider psychosocial or disability risk scales (e.g., PHQ-4, FRQ) if they are having trouble coping.
- Consider referral for behavioral health consultation and assistance.

Care Phase	Assess Risk Factors	Potential Responses
Intake and Care Initiation (~Opening claim and first 2 weeks)	■ Multiple prior claims or time-loss ■ No light duty or employer contact ■ Excessively anxious about RTW ■ Injury during increased work load (e.g., extended shifts; 2 jobs) ■ Poor initial intervention tolerance (e.g., medications/modalities) ■ Lack of active participation	■ Reassure about normal recovery and encourage daily incremental increase in activity (activity diary) ■ If work restrictions given: contact employer about modified duty (worker present/informed) ■ For employer issues with RTW: contact CC or CM for help
If Progress Stalls (~2–6 weeks after opened)	■ Limited functional improvement for type/severity of condition ■ Antagonism about normal diagnostic/consultation findings ■ Failure/resistance with RTW ■ Delays in Adjudication/consultation ■ CC alert regarding a Positive FRQ	■ If no return to work within 2 weeks, ensure FRQ has been completed (AP or CC) ■ Identify possible PDIR risk factors and address the barriers (FRQ workflow) ■ Engage CC or CM for support in addressing positive FRQ
If Inadequate Progress Continues	■ Functional progress plateaus ■ Job of injury is lost ■ Additional diagnoses later in claim ■ Compliance problems with care ■ MMI determination delays (IMEs, vocational issues, work hardening) ■ Contact from CM asking if additional services are needed	■ Discuss next steps with CM ■ Confirm that L&I is coordinating RTW ■ Discuss functional progress, fear avoidance, or activity avoidance with rehab provider ■ Case conference or telephone call to coordinate with other providers

Additional Resources

Learn more about PDIR support resources you can perform in-office at **www.Lni.wa.gov/Psychosocial**, including how to refer for Activity Coaching, Behavioral Health Consult, or Vocational Rehabilitation Counselor.

Abbreviations

AP – Attending provider
CC – Care coordinator
CM – Claim manager
FRQ – Functional Recovery Questionnaire
IME – Independent medical examination
MMI – Maximal medical improvement
PDIR – Psychosocial Determinants Influencing Recovery
RTW – Return to work

Upon request, foreign language support and formats for persons with disabilities are available. Call 1-800-547-8367. TDD users, call 360-902-5797. L&I is an equal opportunity employer.

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AP-Care Team Provided PDIR Intervention Options – Detailed reviews

PDIR interventions should be part of usual best-practice care by attending providers who treat workers. Providers commonly utilize these approaches, yet may not have organized or labeled them in this way. Traditionally, routine PDIR assessment has not been as differentiated and formalized as is reflected here. However, for individuals with existing or escalating PDIR, it is important that attending providers address them with greater intensity before they have a chance to contribute to prolonged chronicity. APs in certain settings may have access to behavioral health providers as part of their care team and should utilize those services as appropriate. For workers having greater magnitudes and intensities of factors, more formalized specialist-provided PDIR intervention options are addressed in the next section.

Motivational Interviewing (MI)

Motivational Interviewing (MI) utilizes communication and counseling approaches to facilitate and engage a patient's own motivation to change their behavior. This approach has shown benefit in the general population with at risk individuals, and has demonstrated long-term improvements in behavioral change targets such as substance use, adherence to medication or treatment programs, and increased physical activity.[11-15] [16-19] It is a goal oriented, patient-centered strategy to enhance the patient's ownership in clinical decision-making and has been utilized in an occupational health setting. Successful provider uptake of MI and implementation into practice after training sessions is well demonstrated.[20]

Engaging the patient toward an active role in injury recovery includes targeting functional improvement and return to work as clinical outcomes goals. When used as a systematic approach to activity adherence, consisting of multiple components targeting behavior and habit, it has been shown to improve patient quality of life[21, 22], improve positive attitude, and decrease depressive symptoms.[14, 15, 23] Administration of MI is effective when delivered over multiple, prolonged encounters, and in short (~15 minute) encounters delivered over time.[22, 24-26]

This approach has been studied and found effective in various populations for both physiologic and psychological conditions.[24] In general the approach has utility for facilitating early adherence to increasing activity but usually requires persistence across multiple days and regular reinforcement.[24, 25, 27] Increased benefit has been demonstrated when MI is conducted by physicians or psychologists than other provider types[24], and shows similar effects when administered telephonically. Some effects may be sustainable, but impacts on improved physical functioning among chronic pain sufferers do not appear to result from MI.[28] It may also speed improvement in patients with severe anxiety when used to tailor cognitive behavioral interventions.[11]

Related/similar approach: Motivational Enhancement Therapy

MI Strategies:

- ***Ask Permission***
  - I noticed on your medical history that you have difficulty getting a good night's sleep. Do you mind if we talk about how different lifestyles can affect sleep?
- ***Evoke Change Talk***
  - What would you like to see different about your current situation?
  - What makes you think you need to exercise more?
  - What will happen if you don't get back to your job?
  - What will be different if you complete the ACTIVITY COACHING program?
  - What is the best thing that could happen if you get back to your job?
  - What would you need to do to make this happen?
- ***Ask How To Be Supportive***
  - How can I help you get past some of the difficulties you are dealing with?
- ***Utilize Reflective Listening***
  - I get the sense that you want to get better, but you have concerns that you won't be supported by your co-workers with your light duty.

Physical Activation

Physical activation pertains to remaining active, performing exercise, and being engaged with rehabilitation. In addition to the physiologic and therapeutic effects of active tissue movement, a multidisciplinary approach incorporating behavioral treatment and graded activity have shown decreases in pain intensity, catastrophizing, fear avoidance beliefs, and demonstrates pain improvements in short term follow-up.[29, 30] There is also evidence that experiential treatment and addressing fear avoidance beliefs during graded activity may have some clinical utility.[31] However, these outcomes are rarely achieved with a simple recommendation to be disciplined and compliant with setting functional improvement goals, incrementally increasing daily activity, stop worrying and perform graded exercises. Meeting these goals requires dedicated attention, encouragement, careful questioning of motivators, reinforcement, expectation setting, and workflows (such as calling between office visits to remind the worker to complete and bring their activity diary with them to an appointment) by the attending provider to facilitate success and a better recovery. Numerous methods of physical activation have been shown to be effective for a number of musculoskeletal conditions including back and neck pain conditions.[32] The effects of activation and exercise are enhanced by better adherence to a program, higher "dose" programs, and when combined with other effective conservative interventions.[29, 32-35]

Related/similar approaches: Activity diary, graded exercise, active care.

Physical activation strategies:

- Negotiate a few activities or exercises a patient can do and use a weekly activity diary to incrementally increase the frequency, duration, and/or intensity of the activity/exercise a small predetermined amount every day.
- Strive for activities to be "quota" limited, rather than pain-limited. The ability to achieve goals, work through increasing function even with pain can be important for self-efficacy as well as tissue healing.
- If providing or referring for physical therapy, chiropractic or other manual care, assure that functional improvement goals are set and being met.
- Utilize a validated functional tracking tool to quantify progress. IICAC Options for Documenting Functional Improvement PDF.
- Resources to help guide low back rehab and activation. IICAC Active Rehabilitation for Low Back resource PDF

Patient Education

Patient education refers to counseling or teaching patients about specific issues that impact their recovery. Straightforward common sense education and communication about a condition and the patient's role in recovery can be considered routine in primary patient care. Attending providers typically include education for issues such as wound care, diet, or blood pressure in a variety of ways including handouts, dedicated office visit time, and/or a referral or recommendation for more focused training. Many psychosocial determinants can be addressed similarly with basic information sharing, but some individuals may require more dedicated effort and interaction. For situations involving greater complexity or severity, referral for a more formal, structured approach (e.g., activity coaching or behavioral health) may be warranted and can be beneficial in both individual and group formats.[36]

Psychoeducation is a term traditionally used to refer to systematic courses or sessions for MH conditions such as clinical depression, personality disorders, eating disorders, schizophrenia, and more.[37] Psychoeducation has been shown to reduce fear scores pre-operatively when it consists of a discussion of fear and anxiety in a psychotherapeutic atmosphere and relaxation techniques.[36] More severe depressive symptoms and lower recovery expectancies following a work related musculoskeletal injury can be associated with a lower probability of RTW.[38] Recovery expectations in one study completely mediated the relation between depression and RTW status at 1-year suggesting that interventions specifically targeting recovery expectancies might improve RTW outcomes.[39]
Patient education approaches can also involve close friends or family members to facilitate the worker's support system.[40] The topics identified here typically may be addressed within usual office visits. However, additional attention, perhaps a dedicated office visit, may be useful for individuals with a particularly challenging PDIR, or a significant number of them. Various brief educational interventions for psychosocial issues such as fear of work activities or pain catastrophizing, motivation to be active, coping, medication use/adherence have been shown to be of value. This section summarizes common areas for which patient education may be useful and simple ideas for addressing them.

A free, useful patient guide for self- management strategies for dealing with pain is downloadable from the UK National Health Service.

Understanding the nature of workers' compensation benefits –workers may have unrealistic expectations regarding the scope and nature of benefits delivered by the workers' compensation system.

- Explain that workers' compensation exists for the purpose of returning workers to work.
- Explain the difference between health insurance (which is concerned about overall health) and industrial insurance (which by law is limited only to recovery from a work injury or exposure).

- Explain that the workers' compensation system is owned both by employers and workers. The medical/legal nature of the system means allowable benefits can be subject to different guidelines, authorization processes, and administrative processes and delays not typical in usual health care.

Promoting a Positive workplace connection – When work injuries occur, it is the attending provider who everyone looks to for determining when and how return to work occurs. The attitudes, expectations, and procedures an AP adopts sets the tone early for a safe and effective return to work.

- Emphasize that a successful clinical outcome from a work injury includes returning to their job.
- The employer is a partner in the process. When work restrictions are given, explain that you will work closely with the patient and their employer to address needed changes to work schedule and activities in order to achieve a safe and sustainable return to work.
- Make sure both the patient and employer receive a copy of the Activity Prescription Form (APF) when restrictions are given, and go over the talking points on the back of the form with your patient.
- Convey that L&I resources such as the Stay at Work Program, Early Return to Work, vocational counselors and health services coordinators may be available to assist with return to work.
- Documenting what activities can be done on an APF, contacting the employer about appropriate job modifications, and connecting with a claim manager or health services coordinator to get assistance to an employer or worker is critical if prolonged time off work appears eminent.

Understanding their injury and pain – Experiencing pain after an injury may result in a concern that pushing too hard may increase pain levels; however avoiding activity also leads to more pain and disability. Without the right perspective, pain can become the central focus of one's experience in an injury; however, keeping focused on function is actually a better strategy. Pain comes and goes, and activity has been shown to not only be a better indicator of recovery, it actually helps reduce pain.

- Explain what pain is (e.g., initially the brain's response to damage or irritation to nerve endings, aka, nociceptive stimulus).
- Explain what chronic pain is not (e.g., it does not equate to damage or harm).
- Explain why sometimes pain becomes chronic (e.g., the nervous system may develop pathways that make the brain think the endings are still irritated, aka, sensitization).
- Explain that many things can increase the experience of pain (e.g., stress, anxiety) or decrease it (e.g., activity, focusing on other things).
- Ask about pain interference (not level): "On a scale of 0-10 how much is your pain interfering with *(an activity important to the patient)*?"
- Great resource on pain education for patients: *www.tamethebeast.org*

Overcoming unrealistic fear – When one is hurting, the last thing one wants to do is make it worse. Yet the very thing one needs to do to recover (e.g., stay active, exercise the injured area) may involve discomfort. Its normal (and life-saving) to avoid things that cause pain; however unrealistic fear of pain or activity leads to avoiding what helps. Simple knowledge and incrementally increasing activity works for most people. Learning to have control over when intolerable pain is experienced also helps. Fear at a level that stops one from doing things may reflect catastrophizing. In such cases, go deeper into what the issues are:

- Ask your patient about what activities they are concerned about, especially things they would do at work.
- Think through the worst thing that could possibly happen if one does something that causes pain. Think through what the most likely thing that happens will be.
- Take small steps to gradually increase activity your patient is worried about.
- Determine if the worker expects they will have a normal recovery ("do you think everything is going to be OK in a couple months?") Assure the patient understands normal recovery and that nearly all musculoskeletal conditions get better.
- Exposure to the activity to see that pain can be prevented, controlled, or tolerated helps overcome unfounded fear.
- When such simple measures are not enough more systematic programs may be in order (Activity Coaching, CBT).

Pacing one-self – Pacing is a strategy for engaging in the right amount of activity (time and intensity) in order to prevent pain flare-ups, or insidious stimulation of a later onset (e.g. doing too much one day and paying for it the next). Pacing involves advance planning for specific activities or tasks, developing work-arounds (timing of breaks, limiting magnitude or weight involved), and adjusting the frequency and/or duration of work. A pacing plan should set reasonable activity level goals – not reactive pain level-based decision making. It should incrementally increase activity, slowly and safely. Pacing for chronic pain might look like this (acute injuries should resolve faster but similar principles apply if functional improvement is stalled):

- Determine the activity baseline: write down the time, distance, or repetitions an activity can be done without a pain increase that lasts more than a half hour. Do this about three times over 3 days and get an average and reduce the amount by 20% to set the baseline. For example if it takes 10 minutes standing doing dishes to initiate a pain increase that lasts under a half hour, set the baseline at 8 minutes.

- Repeat the task daily for several days to a week at the baseline level, then increase the time doing dishes by 10% (a little less than a minute).
- Pacing assures one stops before pain becomes unmanageable and promotes a regular amount of activity each day.
- Many PDIR issues may benefit from incrementally increasing activity which helps address fear avoidance behavior, catastrophic thinking, and recovery expectations, among others. Using an activity diary can help track progress to inform both the patient and the AP.
- A pacing guide from the Western Australia Department of Health with helpful tips designed for chronic pain can be downloaded here

Goal setting **–** Goal-setting can be a promising tool for improving psychosocial outcomes with disabled individuals undergoing rehabilitation.[41] However, the most commonly reported goals patients with conditions such as back pain are concerned with relate to improving physical activity.[42] Key for successful goal setting is relevance and putting them in easily referenced writing. Goals need to be negotiated with the patient; they must have ownership in them. [43]

Patient education strategies:

- Develop "***SMART***" goals: **S**ustainable; **M**eaningful; **A**chievable; **R**ealistic; and **T**imed.
- Break tasks and activities into small, achievable components and build on them. For example, a first step in increasing activity might include varying positions and postures regularly between sitting, standing, and walking for the first day, then add a few minutes of walking the next.
- Place written goals in an easily viewed location (e.g., the refrigerator, workstation monitor screen)

Problem solving **–** Sometimes focusing on a problem and its ramifications gets in the way of doing anything about it. Some people may need guidance in how to work through problems that may arise during their recovery. If there are compliance problems, resistance to increasing or trying different activities, frustration, or repeated setbacks in the picture, inadequate problem solving skills may be a contributor. General problem-solving ability may be negatively related to later stress, suggesting that perceived control can be effective in preventing or reducing stress.[44] As a stand-alone, the impact of problem solving skill development is difficult to distinguish from effects of other patient education, goal setting, or other coping skills. Moderate-quality evidence suggested that problem-solving therapy (PST) significantly enhanced partial RTW at one-year follow-up compared to non-guideline based care but did not significantly enhance time to full RTW at one-year follow-up.[45, 46]

Generally speaking, problem solving represents a systematic approach to identify what the problem that needs addressing is and making written goals for overcoming the problem. Next, written steps to achieve the goal(s) should follow. In addition, identification of multiple alternatives to achieve a goal can help to explore how to decide what to do. Most approaches also incorporate considering what will happen if one takes the steps to achieve the goal or fails to do so. This kind of framework can be useful for remaining compliant with something such as an activity program, but learning to engage in the framework itself can be a self-help strategy for things like pain flare-up, uncomplicated disagreements with co-workers and numerous life challenges.

Related/similar approaches: Problem solving skills training, problem-solving therapy

Patient education strategies:

- Write down the problem needing to be solved (e.g., just can't find time to take walks).
- Write down what a specific the goal (or goals) might be to overcome the problem (e.g., free up 15 minutes in the morning and evening to walk).
- Write down what steps would be required to accomplish it (e.g., select a set time every day to walk before work; set alarm clock for 15 minutes earlier; start the coffee maker to be ready and be a reward when finishing the walk; complete walking around the block twice before taking the morning shower and having coffee).
- Write down alternatives to the initial group of steps (e.g., schedule morning break on outlook calendar at work; find co-worker to take walking break with me).
- What will happen if goal is achieved (muscles will be looser eventually easing low back pain, fresh air, consistency over time burns calories and may lose a few pounds) and if it is not (pain not as likely to go away, tightness will persist, my doctor will keep pestering me, it will be harder to lose weight).

Coping with emotions by mindfulness **-** Mindfulness can be defined as awareness and nonjudgmental acceptance of one's moment-to-moment experience. A number of psychological techniques, systems and approaches have been developed for common distresses such as rumination, anxiety, worry, fear, anger, etc. which may involve maladaptive tendencies to avoid, suppress, or over-engage with one's distressing thoughts and emotions.[47-49] Cognitive behavioral therapy (CBT) approaches have demonstrated effectiveness in addressing maladaptive behaviors associated with the development of chronic pain.[50] Mindfulness approaches which include acceptance and commitment therapy (ACT), mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MBCT) take a different approach. Whereas CBT strives to identify and change maladaptive behavior and dysfunctional beliefs, mindfulness approaches tend to address avoidance behavior.[51] Of the mindfulness approaches, ACT, appears to have the greatest effectiveness, comparable to CBT.[52] The efficacy of any form of mindfulness-based therapy (MBT) in treating patients with somatization disorders indicates a small to moderate positive effect of MBT (compared to wait-list or support group controls) in reducing pain and improving quality of life. Mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MCBT) were more effective than eclectic/unspecified MBT.[53] When MBSR or MCBT were performed

to address multiple physical and mental health conditions, they significantly improved depressive symptoms, anxiety, stress, quality of life and physical functioning. Structured programs (MBSR and MBCT) appear useful to alleviate symptoms, both mental and physical, in the adjunct treatment of cancer, cardiovascular disease, chronic pain, depression, and anxiety disorders.[54] Mindfulness did not predict levels of pain-related catastrophizing.[55]
In physical rehabilitation, mindfulness interventions may be helpful for patients with musculoskeletal and chronic pain disorders and demonstrate trends toward outcome improvements for patients with neurocognitive and neuromotor disorders.[56]
Mindfulness-based interventions (MBIs) for an anxiety or depressive disorder in order to determine how cognitive, affective, and motivational features of depression and anxiety impacted mindfulness based interventions.[57] There were significant post-intervention effects were demonstrated for depressive symptom severity but not anxiety symptom severity.
Effects of MBIs on primary symptom severity were found for people with a current depressive disorder and it is recommended that MBIs might be considered as an intervention for people meeting diagnostic criteria for anxiety or depressive disorders.[57]

Related/similar approaches: Mindfulness-based intervention, meditation, thoughtfulness, awareness, acceptance.

Patient education strategies:

- Mindfulness can include paying attention – on purpose, in the moment, and without judging anything.
- Stay "in the moment." Simply be aware of what you are feeling, doing, your posture, your thoughts, etc. on a moment to moment basis.
- Pay attention to what is going on when pain flares up (e.g., feeling stressed about something, getting tense, or upset).
- Dedicate quiet time during the day to reflect on what you are thinking, feeling, what your muscles are doing (what is tense, what is relaxed).
- The goals of mindfulness are twofold: Improving ones attention to the present moment and developing an orientation that is characterized by curiosity, openness, and acceptance.[58]
- More formal meditation strategies may also be utilized.

Self-Efficacy

The extent to which one has ability to complete tasks and reach goals has been termed "self-efficacy." [59, 60] The concept centers on ideas such as belief in oneself, persistence, setting and achieving goals. It is distinct from confidence or self-esteem in that self-efficacy includes both an affirmation of one's capability for a particular task or challenge, and a strong belief in that capability (as opposed to a more general sense of self-worth or certainty). As a psychosocial approach, relevant intervention domains include a patient's engagement in their own recovery, self-management in coping with life circumstances, or successfully completing prescribed tasks (e.g., following an activity diary, or writing down ones feelings to better focus and examine them). Self-efficacy appears to be strongly associated with the amount of physical activity undertaken,[61] thus there is support for incorporating self-efficacy strategies into treatment plans aimed at increasing physical activity. There is debate regarding the degree to which self-efficacy is a learned behavior versus a genetic trait.[62] A variety of approaches to learn and enhance self-efficacy have indicated that self-efficacy measures and mood were significantly improved across multiple populations, but may not directly influence pain levels.[62-67] It is reasonable nonetheless for attending providers to encourage, and even set expectations for being active participants with their treatment, and that they can achieve functional improvement goals including returning to their jobs. Studies suggest that individuals who demonstrate self-efficacy have higher levels of job and life satisfaction,[68, 69] but direct impact on clinical outcomes is not available. Expressive writing does appear to improve attitudes, feelings of depression, and general satisfaction,[63] but no direct benefit to clinical outcomes (such as pain) has been demonstrated in medically diagnosed conditions.[64, 65] Resilience training is a more systematic goal-directed approach for developing "mental toughness" to withstand and rebound from difficult and traumatic events. It is frequently utilized as a training program in military and executive business settings. [70, 71] Some key elements from resiliency training may be applicable for attending physicians. Numerous stand-alone skill development programs abound, and some specialists incorporate resilience into psychological and coping interventions.

Related/similar approaches: Emotional stability, locus of control, resilience/resiliency.

Self-efficacy strategies:

- ***Engage patient in their own recovery***
    - Assure the worker understands the roles various parties (e.g., employer, claim manager) may also have in the recovery process.
    - Help the worker learn to identify the optimal rate for their own return to physical function that may have been limited due to their injury.
    - Negotiate and obtain agreement about the patient's role and responsibilities in their own care.
    - Give specific assignments and tasks such as activity diaries and educational information that you review at subsequent visits.
    - Emphasize the importance you place on their engagement in order to recover as safely, fully, and expeditiously as possible.

- ***Explore self-management for coping with life circumstances***
  - Understand what to do when becoming stressed.
  - Identify appropriate self-care strategies.
  - Assure they know how and when to get assistance or seek interim care.
- ***Consider expressive writing***
  - Regularly write down their thoughts, feelings and activities when they feeling bad, and when they are not in pain.
  - Serves as a tool for people to monitor themselves in a systematic way. This can help elucidate how one's thoughts impact the experience of pain and facilitate strategies to prevent exacerbations.[72]
- ***Consider resilience building strategies***
  - Recognize change as a central part of all life experience and that crises that happen are not insurmountable.
  - Nurture a positive self-image using realistic goals and achieving them, even small accomplishments, to build confidence.
  - Maintain perspective – choose to view painful and stressful events in a long term perspective; visualize optimistic hopes for the future rather than worrying about current fears.
  - Nurturing supportive relationships may be helpful. On-line self-help, support groups, and other publications abound for a variety of life situations and may be useful to explore before referring to a mental health specialist

Pain Coping

"Pain coping" refers to self-management strategies to prevent and deal with pain when it happens. As a PDIR "intervention," it is not a specific technique, rather an individualized plan for a worker's responses to inevitable flare-ups and bad days. Pain coping may entail other PDIR such as pacing, mindfulness, or relaxation. A patient's understanding of what pain and chronic pain are can be helpful for them to figure out what to do when it happens. Self-management has been studied for chronic musculoskeletal complaints, such as arm, neck, or shoulder pain. Participants in group sessions generally obtained more knowledge and insight into their complaints, as well as increased awareness which contributed to behavioral change and improved coping.[73] However, the process of proactively strategizing to prevent flare-ups is a skill that should be facilitated with acute injuries as well, especially when PDIR have been identified. Changes in psychological attribution and emotional processes predict outcomes. Higher baseline depressive symptoms predict greater improvements, and outcomes were comparable for patients with widespread vs. localized pain. These approaches worked for most patients and had great success in some.[74]
The ability to be able to work through a flare-up can be a powerful psychological aid to recovery.

Pain is the symptom most people, including providers and society generally, tend to focus on. However, attention to the pain experience and its severity may foster unjustified avoidance behavior and actually contribute to reinforcing the pain experience. Focusing on functioning through pain and functioning in ways that prevent flare-ups is a preferred strategy. While pain education explains what pain is and crosses over into overcoming and managing pain, pain coping reflects a more detailed, individualized effort for the worker who is having trouble dealing with pain. Some pain coping techniques may be best learned with the help of a professional. It typically takes practice in order for pain coping techniques to be effective. It is advisable to allow about 30 minutes 3 times a week for working on pain coping strategies. Relaxation and pain control improves with regular practice.

Related/similar approaches: Pacing, relaxation, activity modification.

Pain coping strategies:

- Involve the patient in assessing their pain. Have them ask "What kind of pain am I having?" and "What can make it better?"
- Reinforce the message that the sensation of pain does not mean their body or injured area is being damaged. Consider the example of placing a jalapeño pepper on your tongue.
- Encourage the patient to think about what they can do when pain is present; ask them about what they would like to do that pain is inhibiting them from accomplishing.
- The pain experience can diminish as one becomes conditioned to new activities – athletes experience pain all the time.
- Plan ahead regarding activities and postures that might increase pain; think about what can be done to make adjustment if pain comes on (altering positions, size of loads, available support resources such as a chair, foot rest, side table, a helper).
- Always start tasks and activities, especially new ones, with "baby steps".
- For flare-ups, consider trying relaxation techniques first to work through the pain, then make readjustments to activities and situations that may have triggered it.
- Pain coping strategies include:

- **Relaxation training** – Concentration with slow, deep breathing to release tension from muscles and relieve pain. Focus on relaxing one body part and gradually extend to others (first relax the shoulder, then the upper arm, elbow, forearm, etc.)
- **Imagery & distraction** – Imagery involves concentrating on mental pictures (visualize your back melting into the bed). Picture a favorite pleasant scene or events where you were relaxed and pain free (distraction) to help reduce a pain episode. Another imagery strategy involve imagining the pain as a metaphorical thing such as a glaring light bulb, then imagine slowly turning the dimmer switch down. Another image might be to imagine your painful body part sitting across the room on a chair, separate from your mind, then tell it to stay there.
- **Transferring focus** – Concentrate on a part of the body that is not hurting and imagine it experiencing a different pleasant sensation (e.g., imagine your hand warming up) to take your mind of the area that hurts. Then imagine the warm hand being placed on the painful area and transferring the new sensation to replace the painful one.
- **Counting** – Silently count something (breaths, leaves on a plant, floor tiles, etc.)

Additional Support Systems

Although factors beyond a patient's clinical (mental and physical) condition are not typically considered as a focus of care, all providers are aware of how life can get in the way of a patient's recovery. With work injuries, many such things can impact their treatment adherence, level of anxiety, sense of hopefulness, and desire to get better. A little attention to L&I and other public and/or community resources to help address non-clinical issues that interfere with recovery may go a long way to help speed recovery and reduce an AP's administrative burden. Common issues include dealing with reduced income when off work, addressing transportation needs, finding help with child/elder care, among others.

Non-clinical assistance strategies:

- Consider making an office flier with public transportation information (bus routes, regional transit numbers/websites, even keeping a supply of schedules).
- Make L&I worker resources available (websites, brochures, contact info).
- Identify local public assistance resources (which vary by community).
- Project Help is a free program collaboratively administered by the L&I, the Washington State Labor Council. It is available to anyone (including workers, providers, and employers) needing information on workers' compensation – laws, benefits, resources, or processes. It is particularly useful for those unfamiliar with the system and its complexities, including one-on-one claim guidance for workers. http://www.ProjectHelpWA.com

Relaxation Training and Techniques

Relaxation training refers to any method, process, procedure, or activity that helps a person to relax; to attain a state of increased calmness; or otherwise reduce levels of pain, anxiety, stress or anger. Response to stress takes many forms (e.g. becoming overwhelmed, anxious, or depressed). Relaxation techniques are often employed as one element of a wider stress management program and can decrease muscle tension, lower the blood pressure and slow heart and breathing rates, among other health benefits. Interventions for preventing stress in healthcare workers can be categorized as cognitive behavioral training (CBT), mental and physical relaxation, combined CBT and relaxation, and organizational interventions. Overall, there is low-quality evidence that CBT, mental, and physical relaxation reduce stress more than no intervention, but are not superior to alternative interventions. There is also low-quality evidence that changing work schedules may lead to a reduction of stress. Other organizational interventions have no effect on stress levels.[75]

Learning how to relax requires practice for many people and 'mastering' what works best in ideal settings (e.g., at home) might best be achieved before figuring out how to accommodate relaxation at work. Employees receiving training for on-the-job relaxation training for stress compared pre and post self-reported stress levels.[76] The program used progressive muscle relaxation or breaks for mini-relaxation. Both groups reported meaningful stress reduction scores with a 25-minute session having the largest change. However, shorter sessions also reduced stress significantly and more practice between trainings correlated with greater reductions. Short 1-2 minute mini-relaxation breaks are more likely to be implemented and used in work settings, but require more practice in order to achieve results.

Relaxation approaches generally can be categorized as:

- Breathing techniques (e.g., slow, deep, rhythmic breathing).
- Muscle tension and movement techniques (e.g., contract/relax, progressive muscle relaxation, t'ai chi, yoga, stretching exercise, massage).
- Guided imagery/visualization techniques (e.g., thinking about a pleasant location or experience, imagining a tense body area melting).
- Sensation-related (e.g., biofeedback, concentration on what a body area is experiencing and what thoughts change it).
- Meditation techniques (e.g., mindfulness, transcendental meditation, spiritual approaches).

Self-help resources for relaxation are widely available in books and online. There are also community-based programs. Different people gravitate to different techniques, so it may be helpful to encourage a worker to try different techniques to find which approach works best for them. There may also be many community-based resources for relaxation, meditation, yoga and other self-help options.

Related/similar approaches: Progressive muscle relaxation, yoga, deep breathing (e.g., Pranayamahave), movement based relaxation (e.g. Qigong, Taiji, T'ai chi), biofeedback, meditation, visualization.

Relaxation strategies:

- Find a comfortable position or posture, ideally in a quiet environment.
- Slow, deep, rhythmic breathing can be very helpful for total body relaxation.
- Systematically relax one body area and gradually move to adjacent ones.
- Stretching and aerobic exercise is very helpful for reducing muscle tension.
- Imagery and visualization of things associated with relaxation (pleasant surroundings, a favorite tune) facilitates relaxation for many people.
- Brief 1-2 minute progressive muscle relaxation breaks at work reduce stress, but adequate practice outside of work is needed.

Sleep Habits

Sleep habits refers to activities and routines that foster regular, consistent deep sleep of adequate duration. Restful sleep is important for physiologic restoration of many body processes and is highly correlated with reducing pain.[77, 78] There is some evidence that patients with chronic pain and/or depressive episodes have disruptions in their sleep patterns.[77, 79, 80]

A broad population of adult pain patients can benefit in short- and long-term from non-pharmacological sleep treatments for chronic pain. These treatments were associated with a large improvement in sleep quality, a moderate improvement in fatigue, and small reduction in pain post treatment. Face-to-face treatments achieved better outcomes than those delivered over the phone/internet.[81, 82] Some improvements may be gained with earplugs and eye masks, especially for those in hospital settings.[83] Physical exercise and movement have also been reported to improve sleep quality, in addition to their other beneficial health effects. When applied to chronic pain conditions within appropriate parameters (frequency, duration, and intensity), physical activity significantly improves pain and related symptoms. For chronic pain, strict guidelines for physical activity are lacking, but frequent movement is preferable to sedentary behavior. While no specific exercise outperforms others, a tailored approach, progressed incrementally, and accounting for physical limitations, psychosocial needs, and available resources, is likely to be employed with greater success.[84]

A regular daily sleep cycle, enough time in bed, sound dietary practices, and proper exposure to natural light are considered essential components of good sleep hygiene. Telltale indicators of poor sleep hygiene include sleep disturbances (repeated wakening) and daytime sleepiness. Individual variations may require tailoring sleep routines. Online resources provide additional details and tips for optimizing one's sleep routine.

Related/similar approaches: Meditative movement interventions, relaxation, Self-help books on sleep.

Sleep habits strategies:

- Establish a regular sleep routine – Go to bed and wake up at approximately the same times (within a half hour) every day, including weekends.
- Follow a regular bedtime routine such as a regular quiet period, meditation, warm bath prior to going to bed.
- Avoid regular reliance on naps to deal with tiredness. Naps may make it harder to get to sleep at night.
- Get the right amount of sleep every night. Too little OR too much can upset sleep cycles and contribute to insomnia.
- Avoid eating and stimulants (e.g., caffeine, tobacco, certain medications and supplements) for several hours before bedtime.
- Establish a bed - sleep relationship. Avoid reading, online time, or watching TV in bed to prevent associating the bed with wakefulness. If you can't fall asleep within about 10 minutes, or awake with your mind racing, try sitting in a chair in the dark without stimulation until you feel sleepy again.
- Regular daytime exercise (avoid afternoon or evening workouts) promotes many healthful benefits including facilitating more restful sleep. Even simple aerobic activity such as walking, as well as more meditative approaches such as yoga or t'ai chi can be helpful.
- Bed comfort is essential: a comfortable mattress, good ventilation, comfortable temperature (a little cooler is usually better than warmer) quiet, dark.

Specialist- Provided PDIR Intervention Options – Detailed Reviews

"Specialist-Provided" options in this section may overlap with several AP-provided options, but are generally groupings of PDIR interventions that utilize a number of succinct, brief interventions in a more systematic and intense fashion. Some options are readily available by AP referral. However, the field is evolving rapidly, significant variation in availability and expertise with workers can be an issue in the community. Currently, vocational rehabilitation services and activity coaching are widely available for L&I cases. Referral for brief interventions for behavioral support related to an accepted condition does not require pre-authorization, however if a psychological or psychiatric condition is diagnosed, services can require preauthorization by a claim manager and may require greater support of clinical necessity, e.g. as a barrier to recovery. Increasingly, psychologists and other providers may be able to provide brief interventions for behavioral health support, particularly through relationships emerging within COHEs.

Many providers engaged with chronic pain, care coordination and structured intensive multidisciplinary programs are trained and familiar with these approaches. Still, there is significant variation among providers and across regions. A distinction by provider type or specialty does not directly correlate with best practice approaches for PDIR. In addition to many behavioral health practitioners, many providers of physical methods (e.g., physical/occupational therapists, chiropractor, and physical medicine and rehabilitation physicians) routinely incorporate PDIR strategies that effectively address psychosocial issues influencing recovery. Referring providers are encouraged to understand the intervention options and be able to communicate with specialists to assure that time-limited, functional and goal-oriented, evidence-based options will be provided.

Vocational Services

Private Sector Vocational Providers (typically referred to as VRC's or Vocational Rehabilitation Counselors) can deliver a broad range of services, procedures, and work products to assist workers, employers, and medical providers in the prevention of needless work disability. Their work is initiated by a referral from the claim manager. The referral is then completed in alignment with the return to work priorities as outlined in RCW 51.32.095. Please contact the claims manager if you believe return to work services would help your patient return to work.[85-87]

Activity Coaching

Activity coaching is a generic term to characterize systematic strategies to engage workers in injury recovery in order to return to normal activities (activities of daily living, return to work, recreational or professional athletics). Several common psychosocial dimensions strongly correlate with prolonged disability from work injuries including low recovery expectations, activity avoidance, perceived injustice, catastrophic thinking, along with concurrent mental health conditions such as depression and anxiety.[39, 88, 89] Activity coaching has repeatedly shown benefits in chronic musculoskeletal pain conditions as well as in workers on long-term disability. There are consistent reductions in pain severity, pain catastrophizing, fear of movement, depression, and self-reported disability [90] It appears that in-person coaching has better outcomes than telephonic, but both have shown positive benefits.[91] Pretreatment scores on fear of movement and re-injury or pain severity were associated with a lower probability of return to work while only reductions in pain catastrophizing was a significant predictors of return to work.[92]

L&I has approved activity coaches to deliver the Progressive Goal Attainment Program - PGAP®.[93] The program has been helpful in facilitating return to work in individuals with musculoskeletal injuries, chronic low back pain, as well as mental health conditions such as depression and post-traumatic stress disorder. It allows for a standardized approach of reactivation and cognitive behavioral techniques to address psychosocial dimensions including activity avoidance, catastrophic thinking, perceived injustice, and recovery expectations.

In workers with psychosocial symptoms that need assistance, there are certain situations to consider Behavioral Health first instead of activity coaching:

- GAD and PHQ-9 – Scores in Severe category
- Working more than 4 hours per day or back to work full time
- Upcoming surgery

Referring a worker for activity coaching:

- Link: Patient information about activity coaching
- Link: Referral for activity coaching

Targeted Brief Interventions

Several kinds of providers may be able to offer brief interventions for PDIR problems that are beyond the AP's capacity. Cognitive Behavioral Therapy (CBT) which includes behavioral counseling for coping issues, stress management, problem-solving, goal setting, etc. may be appropriate for some individuals. In settings where collaborative behavioral health care support exists, care managers may be able to offer brief interventions in support of an AP's usual care. In other settings, some psychologists and other

providers may be accessed by referral to focus on a particular PDIR or PDIR that are impeding recovery. Keep in mind that many non-healthcare system or self-care approaches might also be beneficial (such as a yoga class), but would not be considered a covered benefit in workers' compensation. Several types of interventions are listed in the following sections.

Emotion & Behavior Management

At its simplest, emotion and behavior management can be characterized as finding an optimal balance between 'too much' and 'too little' emotion or behavior. Emotions are the feelings one has, while behaviors are the actions one takes based on them. Emotion and behavior management therapies tend to be based on behavioral interventions from cognitive behavioral therapy approaches. Psychologists have typically addressed emotional or behavioral problems with CBT based counseling and a variety of systematic approaches directed at understanding and managing one's feelings and their relationships to behaviors. There are indications that behavior focused approaches (behavioral activation) are equally or more effective than medication or CBT for treatment of major depression.[94, 95] Behavioral activation treatment (BAT) as a treatment for depression has been consistently reported as superior to wait list and treatment-as-usual control groups, but does not show significant differences in outcomes over CBT.[96 97] It has some support for better performance than medication withdrawal in treatment of depression with lower relapse and side effect rates.[95]

Anxiety may also be addressed with emotion and management therapies. Multiple studies have reported strong correlations between anxiety and chronic pain or disability.[98-100] In patients at risk for post-traumatic stress and other anxiety disorders during hospitalization, screening with PAS identified 89% of patients who went on to have anxiety or affective disorder at 12 months. As an intervention, 4–10 sessions of cognitive behavioral therapy outperformed usual care and showed significantly improved mental health at 12 months.[101]
Additionally, the presence of multiple problems may be more significant contributor to disability than any single factor on its own.[98] "Modular" approaches break interventions into understanding it (what brings it on, what it interferes with, what it stops one from doing, variations in its severity – temporary or persistent stress) and dealing with it (managing to cope with anxiety, finding ways to reduce it). Education about coping tools such as relaxation and correcting incorrect assumptions and beliefs and systematic exposure (repeatedly confronting triggering situation in both thought exercises and real life settings make up common treatment "modules." Acceptance and cognitive behavioral approaches have also shown effectiveness in reducing anxiety, however mindfulness-based approaches appear to be inadequate.[57, 102]

Strategies for addressing anxiety:

- Identify common distortions such as jumping to negative conclusions and worst case scenarios.
- Determine all possible outcomes to assess the real odds of the worse outcome.
- Develop lists of ways to cope when a triggering event is encountered.
- Mindfulness and problem solving for scattered thinking, relaxation.

Related/similar approaches: Behavioral activation therapy, modular anxiety treatment, dialectical behavior therapy, functional analytic psychotherapy.

Referring a worker for emotion and behavior management:
CBT and BAT for depression and anxiety are typically provided by psychologists. Increasingly, brief interventions for managing anxiety and stress are becoming available in collaborative care settings, in some COHEs, and by referral to various providers offering brief interventions.

Acceptance Interventions

Compared to the broader scope of emotion and behavior management, acceptance and commitment interventions are geared more narrowly to learn not to fight, rather, improve flexibility to "get over" difficult situations. Acceptance and Commitment Therapy is an example of one systematic approach derived from CBT techniques delivered in solo or group therapy settings usually by a psychologist or similar provider. A 'lighter' version known as Acceptance and Commitment Training is also emerging in classes and online version. Either approach typically involves interventions lasting several weeks. Acceptance of psychological experiences outside of pain was related to catastrophizing severity. Acceptance seems to play a role in the pain experience and should be part of the treatment of chronic pain. The focus of ACT treatment of chronic pain may be aimed at acceptance of unwanted experiences in general.[55]

For mental and physical health of pain patients, mindfulness-based stress reduction programs and acceptance and commitment therapy are not superior to cognitive behavioral therapy but can be good alternatives since all three have small to moderate effects on chronic pain.[52, 103] ACT outperforms passive controls and may be as

effective in treating anxiety disorders, depression, addiction, and somatic health problems (such as anxiety from another medical condition) as established psychological (CBT) interventions, although evidence comparing it to other active therapies shows no advantages.[102, 104]

Acceptance interventions typically emphasize several key elements:[105]

- Reduce tendencies to enable fallacies (e.g., incorrect thoughts, beliefs).
- Learning to allow thoughts to come and go without struggling with them.
- Using mindfulness to stay in the present.
- Delineating one's core values.
- Setting and acting on specific goals.

Related/similar approaches: Behavioral activation therapy, acceptance and commitment therapy, dialectical behavior therapy, functional analytic psychotherapy.

Referring a worker for acceptance and commitment interventions:
CBT and Acceptance and Commitment Therapy (ACT) are typically provided by psychologists. Increasingly, brief interventions are becoming available in collaborative care settings, in some COHEs, and by referral to various providers offering brief interventions.

Resilience Training

Resilience refers to the ability to "bounce back" from difficult or negative experiences. Adapting well in the face of adversity, trauma, stress, or tragedy is a normal characteristic in most people. Health problems, family and relationship issues, financial stress and work stress are among the most common areas where one's resilience is put to the test. Resilient people still experience challenges, difficulty and distress; sadness and devastation are normal reactions to major trauma (emotional or physical). Resilience can be learned in that it is a result of thoughts and actions, which when implemented become behaviors. Training on resilience skills for promoting positive emotion, enhancing neurocognitive capacities, and reducing symptoms showed improvement for primary symptoms and wellbeing outcomes considered meaningful with conditions such as PTSD and chronic pain.[71]
Learning to become (more) resilient utilizes many of the skills and practices associated with other PDIR. And like many PDIR, individuals vary in how they react to life events, their cultural norms, learning strategies and the like. Patients who are struggling with bouncing back need to be engaged in figuring out how to improve their resilience. Various self-help resources are available on-line and in books. Most generalized stress-directed programs to enhance resilience showed favorable outcomes within 3 months.[106]

Behaviors and characteristics of resilience include:

- Setting goals, making specific plans to reach them, then taking actions to do so.
- Maintaining focus on the desired state (e.g., self-confidence, optimism towards achieving goals).
- Problem solving skills.
- Ability to manage one's emotions and behaviors.
- Availability of good family and social support systems.

Cognitive Behavioral Therapy

Cognitive behavioral therapy (CBT) is derived from behavioral models that consider psychopathology to result from maladaptive associations between thoughts, emotions, and behaviors. At its most simplistic, CBT consists of a large multitude of strategies to facilitate a constructive problem-solving relationship between therapist and patient with specific, goal-oriented sessions to modify maladaptive behaviors identified as barriers to normal functioning. Example strategies include: psychoeducation, cognitive restructuring, exposure therapy, behavioral activation, and homework assignments.

CBT approaches have the most outcome evidence of the various psycho therapies supporting its effectiveness. Studies can be found for some conditions that may impact injury recovery such as depression, anxiety, and some personality disorders.[107, 108] The most robust effect of CBT occurs with psychological disorders. Its impact on chronic pain alone seems less robust and CBT may have effects comparable to physical interventions generally.[50, 109] For refractory chronic pain, evidence for sustained comprehensive multimodal programs incorporating physical and cognitive approaches is more robust (see Structured Pain Programs). Time-limited CBT interventions may be best incorporated as adjuncts to usual care for concurrent psychological conditions or refractory PDIR concurrent with usual care strategies, however, such granularity of effectiveness has not been well-studied to date.

Generally, CBT approaches helpful for workers engage them in exploring their thinking and beliefs about their injury and condition by:

- Identifying and discussing underlying beliefs using a non-judging approach ("Tell me what you think might happen…")
- Factually challenging catastrophic and irrational beliefs ("I can see why you think that; Studies show that less than 1% of injuries result in…")
- Replacing irrational beliefs with rational ones ("As the disc material gradually resorbs, the inflamed nerve gradually stops hurting. Increasing your walking just a little bit each day will help speed the process.")
- Developing tangible actions, tasks, and/ assignments to do at home or work.
- Repetition of new beliefs, self-talk, reinforcement of benefits of adaptive approaches.

Issues common to work disability for which may warrant consideration for a CBT referral include:

- Fear and disability behavior with activity avoidance contributing to development chronic pain.
- Moderate to severe depression or anxiety concurrent with worse recovery than would be expected for their injury.
- Moderate to severe levels of perceived injustice associated with low engagement in recovery or care plan.
- Maladaptive thought patterns including helplessness ("it will never get better"), magnification ("this could destroy my life"), rumination ("it hurts constantly"), catastrophic thinking ("if I do these exercise it will paralyze me").

Relevant studies related to CBT

- When CBT was combined with general exercises in chronic low back pain patients, VAS and RMDQ was better in the group that included CBT although both groups showed improvement.[110] However, comparative effectiveness of physical exercise, behavioral/psychologically informed, and combined interventions in chronic back pain patients showed small differences (not considered to be clinically significant) in pain or disability. A principle limitation of that review was the ambiguity of classifying interventions that often contained multiple components.[50] The efficacy of CBT has the strongest support for anxiety disorders, somatoform disorders, bulimia, anger control problems, and general stress.[109] In the treatment of depression, CBT may be superior to antidepressants and equally effective as behavioral therapy.[108]

Specialist Provided MH Interventions – Detailed Reviews

Mental and behavioral health interventions may be considered with diagnosed mental health conditions that are accepted on a claim, if they are a barrier to recovery, or with chronically disabled workers that may be appropriate for an intensive, multimodal pain program. Mental health conditions may not be routinely accepted as work-related conditions. This section provides a high-level summary of the kinds of interventions employed for common mental health conditions which may help inform referral options. Processes, approaches, and techniques used in interventions presented here may overlap with interventions used for PDIR. Various specialists that provide care for mental health conditions may also be able to offer care for the less intense PDIR issues for workers without a diagnosed mental health condition.

Structured Chronic Pain Programs

Chronic non-cancer pain programs consisting of comprehensive, multidisciplinary approaches to addressing reactivation and cognitive behavioral interventions with chronic pain patients exist and may be considered in certain situations. These programs are characterized by ongoing, coordinated intensive on-site care involving multiple specialists. Services are characterized by outcomes-focused, goal-oriented, team management interventions aimed at minimizing impairments, reducing activity limitations, decreasing barriers, and optimizing engagement and participation. Progressive, stepped care strategies directed toward demonstrable functional progress typically involve a variety of CBT, and physical reactivation strategies and often address reducing dependence on addictive pain medications. Repeatedly, multidisciplinary pain programs show benefits in the literature for chronic low back pain compared to usual care or waiting list controls.[111, 112] Pain, function and quality of life all have shown clinically important levels of change, but individual variability is great and expectations may heavily influence the outcomes. [113, 114]

SIMP

L&I identifies "Structured Intensive Multidisciplinary Programs" (SIMP) for coverage of a comprehensive, intensive program with prior authorization by a claim manager. Referrals for SIMPs are primarily authorized for workers who have become chronically disabled. SIMP programs are all day, onsite programs for up to four weeks, with post completion follow-up, typically coordinated with the workers AP. SIMPs must provide the following:

- Evaluation – Comprehensive assessment of the workers clinical, psychosocial, and functional situation with development of a comprehensive treatment plan. The assessment includes review of previous records of care, identification of associated conditions hindering recovery, pain medication use (opioid dependence), psychological and social assessment using validated instruments and tests, support resources, worker-specific factors (e.g., motivation, capacity for participation) resulting in a written report summarizing the assessment and a written preliminary, timed treatment plan that includes potential barriers to successful progress.
- Treatment – Up to 20 business days of full day interdisciplinary care involving physicians, psychologists, physical/occupational therapists, allied staff (e.g., nurses, vocational specialists) and health services coordinators as appropriate. Cognitive behavioral therapy, progressive physical activity / exercise, coordination with other aspects of the worker's life and claim, along with education and skill development for coping with pain are all included as part of the treatment. Progress is tracked measuring both pain and function (including real or simulated work activities) and a discharge plan to continue exercise, cognitive and behavioral techniques, and pain coping skills.
- Follow-up – Within up to six months of discharge, community-based follow-up care for reintegration into work, daily activities and return to work goals may be authorized. Mechanisms for face-to-face and distance services are available.

Other Psycho-therapies

A number of primarily theory-based approaches such as Psychodynamic, Humanistic/Experiential, Systemic, and Integrative therapies are employed in general psychology practice. These kinds of psycho-therapy are typically longer term therapist-client counseling relationship approaches aimed at getting individuals in touch with their beliefs, emotions, cultural, and interpersonal experiences for the purpose of overcoming maladaptive behaviors. As a general rule, the evidence-base for these approaches is limited and primarily theoretical with some emerging empirical literature but without much well-done experimental research.[108] Because of their limited evidence-base and focus on upbringing and life in general, without regard toward recovery and return to work, these approaches generally are not recommended for the addressing psychological issues associated with work injuries.

Medication Management

When treating pain, sleep disturbance and some psychological problems, medications may not be the best option. Many non-pharmacological alternatives are equally or more effective than drug therapy. In addition, many of the drugs commonly used for these conditions (e.g. opioids, sedative-hypnotics and psychotropics) can be particularly problematic due to side-effects or addictive properties. This section briefly addresses some of the drugs that are frequently prescribed for workers which warrant extra caution.

Opioid Medications

Opioids are commonly used in the treatment of acute and chronic pain. However their use in workers' compensation has been associated with significant adverse events including death from accidental overdose and addiction.[115, 116] Further, even a single prescription of opioids for an acute injury is associated with dramatically increased risk of disability.[197] In addition, there is little evidence to support the use of opioids to treat chronic non-cancer pain. The availability of numerous non-opioid and non-pharmacological alternatives warrants careful consideration before prescribing an opioid.[117, 118] For workers on opioids or workers being considered for an opioid prescription, L&I requires adherence to its guideline for Prescribing Opioids to Treat Pain in Injured Workers.

Bottom line: *Opioids should* ***not*** *be a first resort for most musculoskeletal injuries. When prescribed they should be given for a very short time period and closely monitored.*

Psychotropic Medications

Despite common assumptions and marketing, psychotropics have been shown to have benefits over placebo ***only in the setting of specific psychiatric disorders.***[119] There is no evidence of medication effectiveness for mild or sub-threshold depression or anxiety. It is not true that "a little depression or anxiety" should be treated with "a little medication".

Symptoms versus conditions: Major depression and anxiety disorders (e.g. panic disorder, generalized anxiety disorder) require the presence of specific diagnostic criteria. If all of the criteria are not present, a diagnosis is not warranted. The PDIR resource does not address the treatment of such mental health conditions. In the case of a mental health diagnosis, treatment that is directed at the condition (either in primary care or specialty care clinics) should be considered.

There are no DSM diagnoses for "mild depression" or "mild anxiety". Occasional or transient feelings of low mood or unease are part of normal life experience. Adjustment disorder is a DSM condition involving clinically significant symptoms of depression and/or anxiety within three months of an identified stressor, but without meeting criteria for another diagnosis. As with mild or subthreshold anxiety and depression, there is no evidence of benefit from medications in adjustment disorder. As one review found, "The use of psychotropic drugs such as antidepressants, in adjustment disorder with anxious or depressed mood is not properly supported and should be avoided."[120]

Patients may desire something to make them feel better, and providers may feel that their only treatment option is a prescription. A prescription can be the "ticket out the door" to end the appointment. But starting a medication for a mild mental health condition can end up doing more harm than good, for several reasons:

- Patients may come to believe that since they are receiving an antidepressant, they must be depressed.
- Medications are often harder to stop than to start.
- Side effects, including sedation and sexual dysfunction, occur commonly and are not benign.
- Most antidepressants have withdrawal effects (which can lead to a false perception of benefit from taking a pill).

Bottom line: *Unless there is a specific mental health diagnosis, do not prescribe psychotropic medications.*

Sleep Medications

People often complain of difficulty sleeping during stressful life events. Insomnia, restlessness, and inadequate duration of sleep are disturbances for which a provider can make a direct and positive difference. However, before defaulting to prescribing medications for sleep, consider the frequent, unintended, negative consequences from sedative-hypnotics including dependence, rebound insomnia, cognitive problems, and injuries. Sedative-hypnotics can pose a risk for driving, which can negatively affect vocational recovery.

A recent view found that "the comparative effectiveness and long-term efficacy of pharmacotherapies for insomnia are not known. Pharmacotherapies for insomnia may cause cognitive and behavioral changes and may be associated with infrequent but serious harms." [121] Most sleep problems resolve spontaneously, or when the acute stressor improves. If insomnia persists, behavioral approaches are very effective, usually more so than medications. These include structured therapy programs or relatively simple interventions. Given the risks associated with medications for insomnia and lack of long-term efficacy, medications are not recommended for insomnia.

Bottom line: *Taking action around sleep habits is a preferred approach.*

Substance Abuse Treatment

Substance abuse can be a significant problem in all aspects of life, especially for workers coping with chronic disability. Alcohol, opioids (both prescription and illicit), amphetamines and methamphetamines, benzodiazepines, and cannabis are the most common substances for which addiction may negatively impact recovery. Addressing addiction is difficult and time consuming for providers, and like other psychological and medical situations with uncertain work-relatedness, obtaining authorization for treatment under workers' compensation benefits may be difficult.

The attending provider should be sure to document if substance abuse is a problem, including if it may have been a contributor to the industrial injury. If so, this may strengthen justification for substance-abuse treatment being allowed as an aid to recovery and to prevent future industrial injuries.

The effectiveness of various substance abuse treatment strategies depends on the addiction. Generally, behavior modification should be a component of all substance abuse treatment.[122] A component of physical exercise gives general health benefits, but impact on addiction could not be discerned.[123] There is uncertainty regarding the value of brief interventions for substance abuse; comprehensive and ongoing management programs are usually more successful. Opioids, however, may necessitate replacement drugs (such as buprenorphine or methadone) that require special prescribing authorization/licensure. Effects of various pharmacotherapy treatments are reviewed elsewhere.

Some state programs (such as Washington's AppleHealth Program) may pay for certain types of substance abuse treatment, regardless of work-relatedness or insurance. Availability of providers and clinics specializing in substance abuse can be problematic. However when they are an option, this is preferred. Numerous online resources are available to assist providers in working with substance abuse, listed below.

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Resources for Medication Management

Opioid Prescribing and Management Resources

- Washington State Labor & Industries Prescribing Opioids to Treat Pain In Injured Workers: https://lni.wa.gov/patient-care/treating-patients/drugs-and-prescriptions/prescribing-opioids-to-treat-pain-in-injured-workers
- Washington Agency Medical Directors Opioid Dosing Information: http://www.agencymeddirectors.wa.gov/
- US Centers For Disease Control & Prevention CDC Guideline for Prescribing Opioids for Chronic Pain: https://www.cdc.gov/media/releases/2022/p1103-Prescribing-Opioids.html

Substance Abuse and Mental Health Services Administration (SAMSHA)

http://www.samhsa.gov/

- Treatment of substance use disorders: http://www.samhsa.gov/treatment/substance-use-disorders

Providers' Clinical Support System for Medication Assisted Treatment (PCSS-MAT)

http://pcssmat.org/

- offers training and expert mentors to assist with questions or concerns about assessment and treatment of substance use disorders

Washington Apple Health (Medicaid) Program

https://www.hca.wa.gov/about-hca/behavioral-health-recovery/substance-abuse-prevention-and-mental-health-promotion

PDIR Terminology Glossary

Activity (fear)–avoidance behavior – psychosocial factor strongly associated with work disability.

Activity coaching – A multimodal PDIR intervention that assesses the patient's barriers to returning to work and work with the patient to overcome them and return to work.

Activity diary – a brief form for the patient that sets and tracks incrementally increasing daily activity goals.

Biopsychosocioeconomic (BPSE) – refers to biological, psychological, social, and economic factors that may be associated with person who has a medical condition, but may not constitute a clinically diagnosable condition on their own.

Catastrophizing (catastrophic thinking) – a potential maladaptive patient characteristic strongly associated as a risk factor for work disability.

Center for Occupational Health & Education (COHE) – community based health care institutions contracted with L&I. They recruit providers to utilize occupational health best practices, track their performance and assist them, their workers and involved employers with workers compensation claims.

Early return to work (ERTW) – an L&I resource available to assist employers and workers with return to work.

Emotion and behavior management – a PDIR intervention referring to specialist provided programs for depression.

Fear-avoidance – *see Activity (fear) – avoidance behavior.*

FABQ – Fear avoidance belief questionnaire.

FRQ – Functional recovery questionnaire.

GAD-7 – General anxiety disorder (seven question screening tool).

Health Services Coordinator (HSC) – a resource working at L&I's COHEs who assists employers, providers and workers.

IEQ – Injustice experience questionnaire.

Mental health (MH) condition – refers to a clinically diagnosable psychological problem.

Mindfulness – A PDIR intervention referring to awareness and acceptance of one's current experience; a strategy to help manage emotions.

PCS – Pain catastrophizing scale.

Perceived injustice – psychosocial factor strongly associated with work disability that relates to the perception of injustice by the worker. Often toward the care provider or compensation system.

Pain coping – PDIR intervention for dealing with pain flair-ups.

PHQ - Patient health questionnaire; PHQ-4 is a short screening tool for depression and anxiety. PHQ-9 is a deeper screening tool for depression.

Physical activation – a PDIR intervention; refers to all strategies that directly facilitate returning to normal activity, including work.

Progressive Goal Attainment Program (PGAP®) – a standardized, structure program utilizing trained and certified providers to address psychosocial risk factors strongly associated with work disability by using activity coaching.

Psychosocial – a sub-category of biopsychosocialeconomic factors associated with medical conditions commonly considered the most intervenable in health care settings.

Psychosocial determinants influencing recovery (PDIR) – a term coined for this resource to characterize those biopsychosocialeconomic issues that may be associated with workers.

Recovery expectations – a psychological factor strongly associated with injury recovery.

Return to work (RTW) – a central outcome responsibility of workers' compensation systems that is also an important clinical outcome for workers.

Sleep hygiene – a PDIR intervention; refers to bedtime and sleep habits or behaviors that are associated with development and sustaining of chronic pain.

TSK-11 – Tampa Scale for Kinesophobia, an 11 question scale regarding fear of movement.

Vocational recovery – a PDIR intervention utilizing a vocational specialist within L&I (ERTW) or private vocational rehabilitation specialists to assist a patient and employers in return to work.

WHODAS 2.0 – World Health Organization Disability Assessment Scale.

SUPPORT SYSTEMS ASSESSMENT AND CONVERSATIONS

A worker's support system includes their family, friends, employer, co-workers, and organizations they affiliate with (e.g., hobbies, faith, volunteer). Depending on the individual, their clinical condition, and the impact their work injury has on their employment, their personal support system may be pivotal in their recovery and may need to be incorporated into care planning and management. Sometimes questioning about such support can be sensitive and usually a conversational, open-ended approach may be more revealing than a clinical or checklist strategy. A person's demeanor, openness, and body language when discussing family, friends and coworkers may be as revealing as the answers they give.

Example queries

- Tell me about your family.
- Tell me about parents, brothers, sisters, etc. while you were growing up.
- And now? What kind of contact or communication do you have with any or all of them? Why/Why not?
- Who are your closest family members and/or friends?
- Talk about your friends.
- Who do you discuss problems with?
- If you needed assistance, who would you call?
- Tell me about your spouse/partner.
- Do you have any children?
- Which of your coworkers do you enjoy working with the most?
- Tell me about how you help each other out at work.

MANAGING HOSTILITY, ANGER, DISRUPTIVE BEHAVIOR

Stresses associated with difficult events, including work injuries, job loss, or difficult clinical decisions occasionally may place an attending provider in a situation with disruptive behavior from a worker. Some basic strategies to recognize, prevent and de-escalate such situations should be in the toolkit of every provider and staff member. Understanding sources and triggers for hostility, as well as assessment and intervention strategies can help re-direct a challenging interaction toward a positive outcome.

Assessment	Actions
Common Sources and Triggers • Frustration or anger – inability to cope with things out of their control, negative experience with services (e.g., office staff, long waits, claims issues), disoriented in an unfamiliar environment (building or traffic), administrative hassle (paperwork, run-arounds). • Fear – uncertainty, confusion, anxiety about their condition. • Perceived injustice – being dealt with unfairly, wrongly blamed, no-one understood or empathized with. • Intimidation – pressured about decisions, railroaded into something they're not ready for. • Physical or emotional pain – from the injury or clinical procedure, bad news about their job, benefits or results of a diagnostic test. • Significant health problems – aging, memory loss, neurologic problems, vision, mobility. **Predisposing Factors – be aware of:** • Number/magnitude of problems being confronted. • Personality traits (easily agitated, closed body language, avoiding eye contact). • Clinical history (psychological, medical problems – severity and number). • Environmental (noise level, privacy, inconveniences, loss of control or dignity, parking, staffing change such as lunch hour, transporting, or shift changes). • Current events (economy, organizational changes, divorce, layoffs, natural disasters). **Stress Levels** • Normal – alert and engaged; normal reaction to verbal and environmental stimuli. • Moderate – more focused on themselves, missing conversation, environmental stimuli. • High – unable to think about anything other than what they are focused on, muscle tension discernable, impairment of complex verbal or motor activity. • Panic – essentially unable to process any external stimuli, physical changes (e.g., clenched fists, quivering lips, curt speech, exaggerated responses), may be harmful to themselves or others.	**Safety** • Consider work setting and reacting to violence (exits, objects that could be potential weapons, arrangement of furniture). • Arrange rooms so patients are never between others and a door. • Have plan to group staff together; remove others (patients, staff) from situation. **Demeanor and Communication** • If agitation observed, request/offer to relocate to quieter environment, more convenient time, etc. • Speak calmly, never raising voice, always non-confrontationally. • Respect personal space, always ask permission before palpating, examining, explain what will happen, where they will be touched or contacted, ask if they are tolerating a procedure OK. • Be judicious with humor, never laugh at the worker or their problem, or use sarcasm. • Frame conversations around solutions, assisting, being non-judgmental; never patronize, debate, or threaten. **Reducing Stress and Tension** • Be aware for signs of increasing stress (change in demeanor/behavior, glazing over/staring into space, not grasping information, fidgeting/pacing). • Give undivided attention to them, allow silence, use appropriate facial expressions. • Remain calm, maintain eye contact, listen empathetically, speak in plain, simple language with an even rhythm. • Remain outside of their personal space (2-3 feet away). • Allow ranting or venting. • Convey your understanding by paraphrasing what they have said. • Convey willingness to help and your confidence that they can handle the situation or problem.

ADDRESSING SIGNS FOR SELF-HARM/SUICIDE

Patients expressing self-harm and suicide are extremely rare, but when encountered the importance of proper patient engagement and recruitment of support cannot be overstated.

Assessment	Actions
Urgent Intervention Warning Signs: • Direct threats at hurting or killing oneself. • Planning to harm oneself. • Having an intent to kill oneself. • Looking for ways to kill oneself; seeking access to pills, weapons or other means. **Signs Indicating Need for Urgent Mental Health Evaluation:** Safety of an individual may be at risk with the following signs, urgency escalates with more signs present: • Hopelessness. • Rage, anger, seeking revenge. • Acting reckless or engaging in risky activities, seemingly without thinking. • Feeling trapped – like there is no way out. • Increasing alcohol or drug abuse. • Withdrawing from friends, family or society. • Anxiety, agitation, unable to sleep or sleeping all the time. • Dramatic changes in mood. • No reason for living, no sense of purpose in life. **Suicide Risk Factors to consider during evaluation** • End of life preparations (updating wills, divesting responsibilities, making financial arrangements, saying goodbye to close friends and loved ones). • Suicidal ideation, intent, planning, accessing means, talking or writing about it. • Hopelessness – particularly current, high intensity or long duration. • Recent losses – personal, financial, physical or declining health. • Poor self-control, impulsiveness. • Alcohol / substance abuse. • Psychiatric diagnosis, recent discharge from in-patient psychiatric care. • History of abuse (physical, sexual or emotional). • Age, gender, race (elderly or young adult, unmarried, white, male, living alone). • Same-sex sexual orientation. • Chronic pain **Protective Factors From Suicide include:** • Positive family and/or social support. • Spirituality. • Sense of responsibility to family, children at home, pregnancy. • Positive coping and problem solving skills. • Positive therapeutic relationship.	**Do's:** • Actively listen – allow expression of feelings, accept the feelings, and be patient. • Be non-judgmental – • Be direct – talk openly and matter-of-factly regarding the person's behaviors and statements that you have observed and are concerned about. • Be available – show interest, understanding, and support. • Offer hope that alternatives are available, but avoid reassurance that any one alternative will rapidly turn things around. • Take action – Support and provide resource to get this person help. • Get immediate help from others with more expertise before the patient leaves the office. **Don'ts:** • Don't panic – manage your emotions and anxiety around this discussion. • Don't ask "why?" – Engage with the person to understand their reasons. • Don't be sworn to secrecy. – Explain the importance of getting help and remove stigma. • Don't challenge the person to engage in suicidal behaviors. – Be compassionate. • Don't debate or lecture whether suicide is right or wrong or whether the person's feelings are good or bad. – Actively listen and engage in conversation. **Resources:** **Suicide Prevention Resource Center:** http://www.sprc.org/ **1 800 273-TALK (8255)** **Crisis Text Line: Text 'Home' to 741741** https://www.crisistextline.org/texting-in **Washington State Local Suicide Crisis Hotlines:** http://www.suicide.org/hotlines/washington-suicide-hotlines.html **National Institute of Mental Health:** https://www.nimh.nih.gov/health/topics/suicide-prevention/index.shtml **Veterans Crisis Line:** https://www.veteranscrisisline.net/ **1 (800) 273-TALK (2855)** *press 1*

INTERPERSONAL CONFLICT MANAGEMENT AND RESOLUTION

Although most interpersonal conflict can be dealt with using common sense, patience, and clear but civil communication, sometimes high stress situations lead to instances in families or workplaces where professional guidance or mediation may be necessary. Not only can conflict have direct impact on patients in their lives and recovery, Conflict within clinical settings can negatively impact patient care and satisfaction. Personalities, cultural differences, frank differences of opinions or priorities, and misunderstandings frequently underlie such conflicts. When common sense counseling by the attending provider is inadequate, additional resources may warrant consideration. Many attending providers have solid and empathetic communication skills and can counsel workers through difficult interactions associated with their recovery. Some basic conflict management and resolution strategies are included below along with options for additional assistance for both the personal life and the workplace. [124, 125]

Basic Conflict Management & Resolution

About conflict

- Conflict is a frequent life occurrence, variable in intensity, and can happen in anyone's personal life and at any workplace.
- Conflict can have negative consequences (dysfunctional workgroups, resentment, resignation, indirect impacts on coworkers or family members not engaged in the conflict).
- Conflict has significant cost (lost time in conflict, reduced morale, employee turnover, disruption of care and recovery).
- Skillful conflict resolution can have positive consequences (clarification of issues, better decision-making and teamwork).

About resolution

Multiple conflict resolution approaches incorporate common elements:

- Motivation to address the conflict is essential.
- Engagement typically works better than avoidance.
- A neutral and safe environment is critical for engagement.
- Engagement achieves productive outcome without escalation.
- Cognitive, behavioral and emotional skills for addressing conflict can be learned.
- Self-awareness of parties' physical and emotional reactions is needed.
- Accommodation or yielding to gain harmony involves a party not having needs met.
- Yielding to repetitive patterns can cause resentment (kick it down the road).
- Optimal resolution involves balancing needs of all parties.

About skills

- First step is decision to address conflict based on balancing pros & cons:
  - Usually worth addressing when behavior is affected, or conscience is weighed on.
  - Problem or conversation difficulty and perceived power differences should not be barriers to a decision to address conflict (consider lessons learned from workplace safety and aviation (e.g., failure of a lower level copilot not correcting a pilot error).
- Clarify exact nature of the conflict:
  - One-time event should focus on content of the conflict; repeated conflicts might better focus on the pattern.
  - Conflicts frequently relate to tasks/content, processes, or relationships.
- Clarify parties' positions.
- Conflict intensities may due to perspective differences (which can be constructive), misunderstandings (which indicate communication problems); disagreements (different viewpoints with mutual understanding); discord (involving relationship problems even when conflict is resolved); polarization (intense negative behavior and feelings).
- All intensities require willingness for communication and higher intensities may benefit from third party mediation.
- Difficult conversations should happen when parties are calm and collected.

Assistance Options for Workplace Conflict	Assistance Options for Personal Conflict
• For issues related to return to work consider requesting involvement of vocational recovery specialists whose core competencies include ergonomic and workplace assessment, worker interviewing, social problem solving, workplace mediation, knowledge of business and legal aspects, and knowledge of medical conditions.[125] • For interpersonal conflicts in the workplace, consider employer's Human Resource staff, or labor representatives.	• For conflicts among family members' support regarding care decisions, a specialist second opinion consultation may be helpful. • For disagreements from family members' support regarding work and activity recommendations, consider a 'team' consultation including family member, vocational specialist, therapist, etc. • For concerns regarding significant interpersonal conflict and safety at home, consider bringing in a behavioral health specialist familiar with workers and issues that can surround them (COHEs, pain clinics, SIMPs, work rehabilitation centers may have, or know of resources with such expertise).

Validated Brief PDIR and MH Scales - *Table*

There are dozens of scales available to assess risk factors for disability, screen for mental health and behavioral issues. They can help determine the magnitude of psychosocial/coping factors, and include psychosocial elements associated with certain symptoms/conditions. This table highlights easily administered scales that have been validated to capture information especially relevant in worker populations. These scales are available and free to use in practice settings. Alternative scales that cover similar domains are indicated within the tables.

Global disability assessment	What it Measures	Time	Scoring
WHODAS 2.0 -12 or 36 item World Health Organization Disability Assessment Scale Link:WHODAS 2.0	Informally assesses self-reported health status and disability. Administered at baseline suspicion of psychosocial or mental health issues and periodic follow-up for progress.[126-128] **Includes:** Concentrating on doing something for ten minutes? **Domains:** Generic Screening, Disability **Similar Scales**: SF-36MH RAND 36	5 - 20 minutes	12 or 36 items each scored 0 (none) to 4 (severe) then summed. For score interpretation, see here: WHO Meaningful change: poorly defined capability to track progress and change. Recommended as a "snapshot" evaluation of disability from multiple sources.
RAND or Short Formv1 Questionnaire (12 item or 36 item) Link: RAND 36	36 item: a general health status questionnaire that includes sections on general health and well-being, mental health, physical function and others [129-131] 12 item: generic assessment of health related quality of life measured using two scales, a mental scale and a physical scale **Includes**: Does your health keep you from working at a job, doing work around the house, or going to school? **Domains**: Generic Screening, Disability **Similar Scales:** SF-36MH (various paid versions)	5 – 20 minutes	12 item: Two scales, with overall scores transformed to a range from 0-100 with a higher score indicating better health. 36-item: 8 scales, with overall scores transformed to a range from 0-100, with a higher score indicating better health. Meaningful change: 6-8 is likely the smallest detectable score change, whereas 10 points likely signifies meaningful improvement in a variety of disease states.
PROMIS-10 **Link:** PROMIS-10	Patient-Reported Outcomes Measurement Information System 10 Assesses general domains of health and functioning including overall physical, mental, and social health, as well as domains of pain, fatigue, and quality of life. [132] **Domains:** Generic Screening, Disability **Similar Scales**: SF-36MH, RAND 36	<5 minutes	10 items, with 9 items scored 1-5 and one item relating to pain scored 0-10. Further scoring information can be found here.

PDIR Scales	What it Measures	Time	Scoring
AAQ-II Acceptance and Action Questionnaire Link: **AAQ-2**	Measures progression of Acceptance and Commitment Therapy (ACT), psychological inflexibility, or experiential avoidance in coping with life issues.[133-135] **Includes:** When I feel depressed or anxious, I am unable to take care of my responsibilities; I rarely worry about getting my anxieties, worries, and feelings under control **Domains:** Acceptance, avoidance **Similar Scales:** n/a	< 5 minutes	Scale scored by summing the seven items. Higher scores equal greater levels of psychological inflexibility
Brief COPE	Assesses various coping strategies used by individuals in response to stress. Available as 60 item (Complete COPE) or 28 item (Brief COPE) [136, 137]	< 10-30 minutes	14 scales of two items each, scored separately. Scored 1 (I haven't been doing this at all) to 4 (I've

Brief - Coping with Problems Experienced Link: **Brief COPE**	**Includes:** I've been giving up trying to deal with it; I've been trying to come up with a strategy about what to do **Domains:** Coping Skills **Similar Scales**: CD-RISC, BRS		been doing this a lot). Higher scores indicate increased utilization of that specific coping strategy.
BRCS Brief Resilient Coping Scale Link: **BRCS**	Assesses ability to bounce back from stress and resilience.[138] **Includes**: It is hard for me to snap back when something bad happens; usually come through difficult times with little trouble **Domains**: Coping Skills and resilience **Similar Scales**: CDRS, Brief Resilience Scale, Brief COPE, SF-36 MH	< 5 minutes	Four questions scored 1-5 and summed. Low resilient copers 4-13 Medium resilient copers 14-16 High resilient copers 17-20
FABQ Fear Avoidance Beliefs Questionnaire Link: **FABQ**	Measures fear avoidance beliefs relating to physical activity and work, focusing on the effect and contribution to low back pain. May help identify acute back patients at risk of poor outcomes or 6mo physical therapy outcomes. Can be adapted by changing items 3 and 11 to their condition.[139-141] **Includes**: I cannot do physical activities which (might) make my pain worse And My work aggravated my pain **Domains**: Fear-avoidance, Catastrophizing, Disability **Similar Scales**: FRQ, STarTBACK, correlates with TSK-11[142]	5-10 minutes	Scored as total sum of agreement responses; Subscales can be used relating to physical activity (items 2-5) or work activity (items 6, 7, 9-12, 15). A higher score represents elevated fear avoidance beliefs. Not designed as a tracking tool, but 30-50% may show meaningful improvement.
FRQ Functional Recovery Questionnaire Link: **FRQ**	Screens for long-term disability risk from work injury. Administered at about 2-6 weeks of time loss due to work injury, the first 3 questions are predictive of disability at one year post-injury. The other questions cover work accommodation, recovery expectation and fear-avoidance. Its strengths include brevity, validated risk prediction, and initial indication of which PDIR attending providers should focus on early in care [2, 6, 7, 10] **Includes:** Do you have persistent bothersome pain? In the past week how much has pain interfered with your ability to work, including housework? **Domains:** Generic Screening, Disability **Similar Scales:** STarTBack	< 5 minutes	Items 1-3 determine positive risk: FRQ + means person has not worked for pay due to injury **and** pain interference ≥ 5/10, **and** pain in 2 or more body areas. Items 4-6 identify vocational connection, fear-avoidance, and recovery expectations which strongly correlate with risk. Has not been validated to track improvement
IEQ Injustice Experience Questionnaire Link: **IEQ**	Intended for use with persistent pain from associated musculoskeletal conditions. Assesses perceived injustice associated with injury, and how that has affected the worker's life. Can be predictive of return to work and correlates with improvements in physical function.[143, 144] **Includes**: Most people don't understand how severe my condition is And My life will never be the same **Domains**: Injustice, Self-Efficacy, Catastrophizing **Similar Scales**: none	< 5 minutes	12 statements, scored 0 (never) to 4 (all the time). Higher scores indicate more perceived injustice. Among those scoring above 30, 76% remain unemployed 1 year post injury and 74% describe themselves as totally disabled.
LiSAT-9 Life Satisfaction Questionnaire 9 Link: **Lisat-9**	Assesses various aspects of life satisfaction, including vocational and family life.[145-148] **Includes:** My family life is And my financial situation is **Domains**: Life Satisfaction **Similar Scales**: SF-36	10-30 minutes	Consists of 9 questions, items scored on a 6 point scale, from 1 (very dissatisfied) to 6 (very satisfied). Overall score is computed as the mean of the scores from each question.
MPQ	Measures current pain severity and character across multiple dimensions and components. One of the gold standards for pain evaluation either monitoring over time or for effectiveness of care.[149, 150]	10-30 minutes	Composed of 78 words, respondents choose those that best describe their experience of pain. Scores

McGill Pain Questionnaire Link: **MPQ**	**Includes**: Sensory-Flickering/beating, sharp/lacerating; Evaluative-Annoying, troublesome **Domains**: Pain **Similar Scales**: Visual Analog Scale		are calculated by summing values associated with each word; scores range from 0 (no pain) to 78 (severe pain)
MSPSS Multidimensional Scale of Perceived Social Support Link: **MSPSS**	Measure of an individual's perception of social support received from family, friends, and significant others.[151, 152] **Includes**: There is a special person who is around when I am in need; I can count on my friends when things go wrong. **Domains**: Social Support **Similar Scales**: n/a	10-30 minutes	Scored by calculating mean score among items. Lower scores are representative of a lower perceived social support system.
PCS Pain Catastrophizing Scale Link: **PCS**	Assesses catastrophic thinking related to pain; shown to predict chronicity and disability.[153-155] **Include**s: *When I'm in pain, I feel I can't go on And When I'm in pain, I keep thinking about how much it hurts* **Domains**: Pain, Catastrophizing, Self-Efficacy **Similar Scales**: Coping Strategies Questionnaire (CSQ), Pain-Related Self-Statements Scale (PRSS), Cognitive Coping Strategy Inventory (CCS).	< 5 minutes	Consists of 13 questions on a 5 point scale. Scoring is 0 (totally disagree) to 4(totally agree). Higher scores indicate a higher degree of catastrophizing. Those scoring above 30 have high rates of disability.
PDI Pain-Disability Index Link: **PDI**	Assesses degree of perceived disability and impact across 7 categories of life activities that are disrupted by chronic pain.[156-158] **Includes**: Occupation and self-care categories **Domains**: Disability **Similar Scales**: FRQ, Pain Interference Scale, Québec Pain Disability Scale (QPDS)	< 5 minutes	Scoring is on a 0 (No disability) to 10 (Worst disability). Scale based on overall impact of pain on life. The higher the overall score, the higher the worker's disability due to pain. Can be used to monitor effectiveness of interventions.
PEG Pain, Enjoyment, General Activity Scale Link: PEG	An ultra-brief pain interference scale derived from other multidimensional pain measures. Assesses degree of perceived disability for chronic pain due to pain intensity, interference with enjoyment, and interference with general activities.[159] **Includes**: Pain intereference with enjoyment of life in the past week? **Domains**: Disability, Pain interference, **Similar Scales**: PDI, VAS, Graded Chronic Pain Scale	< 5 minutes	Three questions scored from 0-10 regarding average pain, pain interference with enjoyment of life and interference with general activity. Scores may help guide further questions and can be used to assess treatment.
PSFS Patient Specific Functional Scale Link: **PSFS**	Self-assessed ability to complete activity prior to injury and current level of ability post injury. Used to quantify activity limitation and measure functional outcome for patients with any orthopedic condition.[160-163] **Includes**: Any 3 activities that the worker is unable to do or has difficulty doing as a result of the injury or pain level. **Domains**: Disability, Activities of Daily Living **Similar Scales**: PDI	< 5 minutes	Patients rate their current ability to complete an activity on an 11-point scale at a level experienced prior to injury or change in functional status. A score of 0 represents "unable to perform" and a score of 10 represents "able to perform at prior level" A lower score represents increased patient difficulty in completing important activities.

TSK-11 Tampa Scale for Kinesiophobia Link: **TSK**	Measures the role fear of movement and re-injury plays in transition from acute injury to chronic pain behavior.[164-166] **Includes**: If I were to try to overcome it, my pain would increase And I am afraid that I might injure myself accidentally. **Domains**: Fear-Avoidance , Disability **Similar Scales**: n/a	5-10 minutes	Consists of 17 statements, scored by the patient on a 4-point scale of 1 (strongly disagree) to 4 (strongly agree). Higher scores represent a higher degree of kinesiophobia.

MH Scales	What it Measures	Time	Scoring
CAGE-AID Cut down, Annoyed, Guilty, Eye opener - Adapted to Include Drugs Link: **CAGE-AID**	Screens for alcohol and drug problems conjointly, regarding response to 4 questions.[167] **Includes:** Have you ever felt that you ought to cut down on your drinking or drug use? And Have you ever felt bad or guilty about your drinking or drug use? **Domains**: Addiction and Substance Abuse **Similar Scales**: AUDIT (new HVMC trauma) [168]	< 5 minutes	One or more positive responses is considered a positive screen.
PHQ-4 Patient Health Questionnaire 4 Link: **PHQ-4**	Consists of first 2 items of PHQ-9 [169-172] and first 2 items of GAD-7 [173]. Ultra-brief depression and anxiety screener may be useful in primary care and occupational settings to identify slow responders at risk for chronic pain and disability, while patients may not always see the relationship to MSK injuries. [174] **Includes**: Over the last 2 weeks: I have been feeling nervous, anxious or on edge; I have little interest or pleasure in doing things **Domains**: Mental Health, Depression, Anxiety, Screening **Similar Scales:** PHQ-9, GAD-7, SF-36MH	< 5 minutes	Consists of 4 items scored 0 to 3 based on how often patient has experienced problems in the last 2 weeks. Scores are rated as normal (0-2), mild (3-5), moderate (6-8), and severe (9-12)

Evidence and Methodology

A comprehensive search of available literature on psycho-socio-economic (PSE) factors associated with common work injuries was conducted by a joint subcommittee of the IIMAC and IICAC along with department staff during winter 2019. Literature was reviewed and assessed for relevance and quality by two different individuals. Summaries of the relevant evidence were drafted by consensus of the subcommittee with expert content input from consultants and reviewers during spring and summer 2019. The draft was distributed for public comment in September 2019. An updated draft was approved for distribution by the IIMAC, IICAC and department in October 2019. This resource is expected to be updated periodically. Interested parties are encouraged to submit new published reports for consideration for future revisions.

Literature Retrieval and Review

1. **Initial systematic searches** of electronic databases (e.g. PubMed). Search terms used typically included MeSH terms for tests and interventions with conditions being addressed. Follow-up searches also included population attributes (e.g., workers' compensation, occupational).
2. **Abstract screening** for relevance.
3. **Original paper retrieval** with review for relevance, quality, outcome meaningfulness, and effect magnitude.
4. **Additional studies identified** through clinical summaries (e.g., reviews, texts), citation tracking, and feedback from experts and public.

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About Evidence for Psychosocial Examination and Conservative Interventions

Conservative care is typically care of first resort based on long standing practices. Typically low tech, low cost, with minimal and rare side effects, it is often delivered in portal-of-entry settings by various health providers. The rigor and quality expected of high cost, higher risk, emerging, and tertiary interventions is less common for many routine conservative interventions. Thus, the committee has not presented explicit *recommendations*, rather, *evidence synthesis* guided by expert consensus to assist in formulating care options. Further, significant emphasis is made regarding tracking and documenting meaningful functional improvement with patients. Study attributes most likely to strengthen or limit confidence are characterized in the evidence descriptions.

Assessing Study Methodologic Quality

Attributes of study methodology quality vary according to the clinical procedure (e.g., diagnostic, therapeutic intervention), and specific research questions being studied. The American Academy of Neurology's Clinical Practice Guideline Process Manual offers a comprehensive guide to systematic evidence review, quality attributes and consensus process that generally serves as the approach taken by IICAC.[175]

General attributes identified when extracting evidence from studies include identification of population, the intervention and co-interventions and outcomes addressed in each study. Specific quality attributes include: Diagnostic Accuracy – design, spectrum of patients, validity and relevance of outcome metric; Therapeutic Interventions – comparison groups (no treatment, placebo, comparative intervention), treatment allocation, blinding/masking (method and degree: single, double, independent), follow-up (period and completion), and analysis (statistical power, intent-to-treat). Specific attention is paid to several factors including reporting of outcomes (primary vs. secondary), relevance of outcome (e.g., function vs. pain), and meaningfulness (clinically important change vs. minimally detectable change).

Synthesizing Evidence

Consideration of study quality, significance, consistency across studies, magnitude of effect, and relevance to populations and procedures were taken into account in preparing draft summaries. Special attention was given to clarifying conclusions related to the clinical questions of interest. Evidence, particularly with low tech and highly diffused examination and conservative procedures addressed here, is rarely definitive, even when multiple studies exist. Inconsistent conclusions typically reflect error and/or bias in studies.

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