Physical Therapy in the Injured Worker:
A Narrow Focus on Overutilization Leads to Missed Opportunities for Cost Containment
Undeniably, overuse of physical therapy is a contributor to elevated costs in workers’ compensation. However, programs that focus solely on targeting potential overutilization are severely limited in their effectiveness. While curbing overutilization is an important part of cost containment, there are also significant financial ramifications from a population of underserved injured workers, i.e., those who aren’t receiving the treatment they require to achieve functional improvement. This can happen at a number of different touchpoints:

- The physician fails to prescribe appropriate therapy in the first place
- The injured worker elects to stop therapy (patient nonadherence)
- The treatment provider delivers ineffective physical therapy services (which in turn can drive overutilization or patient nonadherence)

All of the above scenarios cost the payer money. A management strategy that is narrowly focused on one scenario – which in workers’ comp has traditionally been overutilization – is limited in that it overlooks other components of the larger problem. It is a shortsighted approach, one that might be compared to bailing out a rowboat while ignoring the hole at the bottom of the vessel. In order to achieve optimal results, a physical medicine program must manage the full spectrum of potential cost drivers.

AMONG INJURED WORKERS, “AVERAGE” IS A MOVING TARGET

Despite years of research, pain remains a nebulous diagnosis. For example, lower back pain (LBP), one of the most common and costly injuries in workers’ compensation claims, is a highly heterogeneous condition with distinct clinical courses among subsets of patients. In many cases, acute LBP will resolve with minimal intervention. However, the small portion of patients that go on to develop chronic LBP ultimately contributes to three-quarters of total medical costs and lost productivity associated with LBP.

Figure 1. 10-15% of Patients Drive the Majority of LBP-Related Costs

[Diagram showing 75% of LBP Costs]
Considering the wide disparity within the injured worker population, it is unrealistic to believe that management of physical therapy services can be boiled down to a pre-selected “average” by which the treatment course for any given patient must be measured. Rather, the optimal amount of therapy is a moving target based on individual patient needs. As such, rather than focusing on number of therapeutic visits, management of physical medicine is best served by evaluating effectiveness vs ineffectiveness of treatment. More so than traditional physical medicine models, this strategy reflects the oft-repeated phrase in workers’ compensation of “right care, right time,” as treatment effectiveness is highly dependent upon both timing and quality of care.

OPTIMIZING UTILIZATION THROUGH EARLY RISK STRATIFICATION

Ensuring the effective delivery of physical therapy services begins early. Physicians cannot adopt a “wait and see” strategy in patients with acute LBP, because waiting too long in high-risk patients means lowering the chances of achieving positive outcomes. However, the goal here is also to not unnecessarily initiate physical therapy in more patients, as this will lead to excessive cost. Rather, the key is to identify upfront the patients that will derive the most clinical benefit from these services. From a financial perspective, payers can view this as a redistribution or reallocation of services. By stratifying patients according to their risk level, overutilization can be avoided by eliminating unnecessary prescribing of services in low-risk patients; concordantly, a valuable investment is being made for long-term gain in a more complex, high-risk population. It is the difference between optimizing utilization versus merely controlling it.

Additional Opportunities for Cost Containment in Physical Therapy

An enhanced physical medicine model goes beyond controlling utilization to reduce costs due to:

- Poor long-term outcomes
- Ineffective therapy
- Patient nonadherence
- Avoidable procedures and surgeries
- Excessive or unnecessary services (e.g., imaging)
- Prescription medications
The risk stratification process, which has already demonstrated positive outcomes in the specialist setting, can also be initiated early and successfully in the primary care setting. The prospective IMPaCT Back Study examined the impact of an evidence-based risk stratification program vs usual care on outcomes in 922 patients with LBP. With stratification, primary care physicians were more likely to prescribe risk-appropriate use of physical therapy (i.e., non-referral of low-risk patients and referral of medium- or high-risk patients). Patients in the stratified group experienced a decrease in disability score based on the Roland-Morris Disability Questionnaire (RMDQ) at 6 months, and the difference was most notable for patients at high risk for poor outcomes. Mean time off work was also significantly reduced from 8 to 4 days, a 50% change. 

The ability to identify early on those patients who are at high risk of poor outcomes can reap significant clinical and financial benefits. In a retrospective analysis of electronic medical record (EMR) and insurance claims data, LBP-related utilization and costs were compared in patients receiving physical therapy (n=385) as initial primary care referral vs magnetic resonance imaging (MRI; n=377). Overall, average cost per patient over a 12-month period was approximately $4800 higher for the imaging group, reflecting a 70% decrease in the physical therapy group. An initial referral for MRI rather than physical therapy also increased the odds of surgery, injections, specialist, and emergency department visits. Similarly, the Washington State Disability Risk Identification Study found that administering an MRI earlier than recommended guidelines in patients not exhibiting red flags for chronic LBP increases the likelihood of injections or surgery. This practice also increases utilization of outpatient and physical/occupational therapy by approximately 50%.

Identifying when and in whom to initiate therapy is just the first step towards optimizing utilization. A successful management strategy must also assess the quality of physical therapy services provided. Quality in this case refers not to price, but rather, adherence to evidence-based and outcomes-focused treatment. In an analysis of more than 120,000 patients receiving physical therapy services for LBP, those that received therapy adherent to evidence-based guidelines experienced lower utilization of physical therapy visits (6.2 vs 15.0), advanced imaging, lumbar spinal injections, and lumbar spine surgery compared with patients receiving physical therapy services that were discordant with guidelines. Overall LBP-related costs, as well as prescription medication costs, were also reduced for the guidelines-adherent population. In this sense, quality of service becomes the driver for containment of cost and utilization.
OBJECTIVE MEASURES, ONGOING ASSESSMENT

From a conceptual standpoint, the delivery of timely and quality care is a logical approach to optimizing utilization of physical medicine services. However, the only way these concepts become meaningful is through their measurable translation into positive clinical and financial outcomes.

Exactly how do we measure the quality of treatment? Let’s hit the reset button and return our focus to the overarching goals for the workers’ compensation system: restoring function to the injured worker and reducing time off from work. In order to assess the effectiveness of a service in achieving those goals, there must be in place objective measures of clinical progress: range of motion, strength, return-to-work. If these aren’t being measured, then clinical progress towards desired outcomes is not truly being assessed. Yet these measures have often been missing from traditional physical medicine management programs in workers’ compensation.

In addition to measuring positive outcomes, a comprehensive model must be able to measure risk factors that may have a negative impact on treatment efficacy. Fear avoidance, for example, is a very real challenge faced by many injured workers in physical medicine programs. High-level evidence supports the association of fear avoidance beliefs with poor treatment outcomes, including pain and disability levels, and return to work. Conversely, when these beliefs are addressed with the patient, treatment efficacy is more likely to improve. The ability for a payer to identify and address these negative risk factors goes a long way towards increasing the odds for positive outcomes.

These data are critical to effective evaluation of treatment providers, but equally important are when and how these data are being collected. Collection of data at key time points enables payers to accurately assess quality along the care continuum, allowing them to more effectively manage patient care and provider networks.

Figure 3. Ongoing Assessment Drives Effective Care

<table>
<thead>
<tr>
<th>Initial Assessment</th>
<th>Re-Authorization</th>
<th>Discharge</th>
<th>Assessment at key time points can:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess risk for long-term disability</td>
<td>Evaluate continued therapy based on objective improvement</td>
<td>Assess clinical progress achieved since initial assessment</td>
<td>✓ Ensure clinical appropriateness of therapy throughout treatment course</td>
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<tr>
<td>Evaluate clinical appropriateness of therapy</td>
<td></td>
<td></td>
<td>✓ Shorten return-to-work</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Identify early roadblocks to recovery</td>
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HELPING PAYERS TO OPTIMIZE PHYSICAL MEDICINE MANAGEMENT

Healthesystems provides a significantly enhanced physical medicine model that allows payers to more effectively assess quality and optimize utilization of physical medicine services. The program was developed with the insight that collecting the right data at the right time requires the right platform. Physical medicine represents an expansion of Healthesystems’ revolutionary ancillary benefits management (ABM) platform, which provides centralized management of services including home health, durable medical equipment, transportation, and translation. The platform is able to capture and codify crucial information that historically has not been structured in a way that is actionable to the claims professional (e.g., evidence of nonadherence documented in handwritten notes). This translation of anecdotal information into electronic, codified data enables it to be integrated more effectively into care decisions. Healthesystems then applies logic to these triggers to proactively alert claims professionals, rendering the data more actionable.

Having a more comprehensive data set allows for a more complete and accurate view of the quality of therapy and provider performance for the payer. Healthesystems’ program includes measures that are overlooked by conventional physical medicine programs, including specific measures of:

- Clinical outcomes (e.g., range of motion, strength)
- High-risk indicators (e.g., fear avoidance, nonadherence)
- Return-to-work
- Administrative efficiencies
- Vendor performance
- Network data

Healthesystems believes that a comprehensive approach to treatment leads to the best possible outcomes for patients and payers, and our innovative platform supports this strategy. Our integrated program merges traditionally disparate data, providing a holistic view that enables payers to assess the impact of physical medicine services within the context of the overall claim.

To learn more about how Healthesystems is redefining management of physical medicine services, visit [www.healthesystems.com/physicalmedicine](http://www.healthesystems.com/physicalmedicine)
REFERENCES


