## The Journal of Workers Compensation

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# Effectiveness of Enhanced Mental Health Care Management

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Significant delays in claim closure can result when psychiatric issues complicate the recovery process of physical injuries.<sup>1</sup> The third party administrator (TPA) of one large manufacturer set out to analyze the problem and develop interventions in response to concerns that mental health overlays were extending the lost time associated with workers compensation claims. The TPA's medical department, in collaboration with care management units, triaged all claims with mental health components and implemented new strategies for case resolution.

Significant favorable outcomes were achieved in the study period versus the baseline period, including a 20 percent drop in mental

health services per claimant and a 16 percent drop in the amount paid per claimant for mental health services. These results were driven by a significant decrease in the number of psychotherapy sessions without medical management during the study period as compared to the baseline period (p=0.000).

Other favorable outcomes included improved rates of timely return to work, identification of noncompensable conditions, documentation of maximum medical improvement (MMI) status, and appropriate utilization of mental health services. The results of this pilot program suggest that a multidisciplinary triage and care management model should be considered an industry best practice.

## METHOD

The TPA's claims adjusters voiced a concern that many of the company's claims were developing a mental health overlay that negatively affected claim resolution. The TPA established a pilot program to triage its claims with respect to mental health needs, use intensified care management strategies, and document the impact of its interventions. Those working on the pilot program included the following:

- chief medical officer and associate medical director;
- behavioral health unit;
- field care management unit;
- telephonic care management unit;
- claim adjusters; and
- physician review services (the peer review unit).

The claims adjustors on the account reviewed all the company's open claims and submitted a comprehensive list of claims that contained any type of mental health condition or concern, regardless of whether the condition was deemed compensable or not. They identified 128 claims.

A team was created to find opportunities to apply enhanced clinical care management through the use of a collaborative multidisciplinary model. All 128 claims underwent triage. Of these, 73 claims were excluded from specialized care management based on any one of the following five factors:

- The mental health care had been discontinued.
- The mental health condition was determined not to be of an industrial nature and was not adversely affecting the current claim.

- Ongoing mental health care was at maintenance level only.
- The claim was in litigation.
- The claim was moving to settlement and no interventions were applicable.

The remaining 55 cases were assigned to a TPA care manager, either in the behavioral health unit (46 cases) or the field care management unit (9 cases).

#### **Study Phases**

In order to establish prepilot mental health service baseline costs for the company's claims, data were pulled from the TPA's medical bill review system for the six-month period prior to the onset of the pilot. The total amount of mental health services used by the company from October 1, 2004, through March 31, 2005, was arrayed across 12 mental health Current Procedural Terminology (CPT) code groupings (see Exhibit 1), representing 12 practice-pattern baselines.

The second phase of the study, the "planning" phase, ran from April 1, 2005, through May 31, 2005. During this time, the 128 initial claims were scheduled for interdisciplinary triage meetings designed to explore additional claims handling strategies. The triage meetings, or "rounds," were held telephonically on a weekly basis and approximately six to eight claims were reviewed per session.

In each round, the claims adjustor presented the case for discussion. In regular attendance were the senior nurse reviewer from the telephonic care management unit who was assigned to oversee the company's claims; a senior nurse reviewer and nurse care manager from the behavioral health unit; care managers from the telephonic care management and field care management units; and, periodically, the associate medical director, who is a clinical psychologist.

The multidisciplinary panel discussed each claim with respect to possible care management and medical service needs, as well as applicable litigation strategies. Specific clinical management options, such as nurse care management, independent medical evaluation, and consulting physician review, were addressed on each claim.

Cases were also analyzed with respect to lost time, rehabilitation progress, the physical and emotional barriers that prevented a release to return to work or a release from care, and the treating provider's current and projected opinions regarding work ability. In claims in which psychiatric or psychological treatment was being reimbursed under workers compensation, treatment progress, or lack thereof, was discussed in detail.

The last phase of the study, the "intervention" phase, ran from June 1, 2005, through November 30, 2005. During this time, the 128 claims were dropped to 55 for the reasons described above (i.e., they had ongoing mental health conditions, the conditions were of an industrial nature and were adversely affecting the claim, the mental health care was beyond mere maintenance level, and the claim was not in litigation or moving toward settlement). The remaining 55 claims were then assigned to either the TPA's behavioral health unit or the field care management unit.

1-99215 1 4, 90806, 90808, 0 5, 90807, 90809, 2	Mean Amount Paid in Study Sample not in sample \$182.06 \$115.44	Charges in
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0 5, 90807, 90809,		\$128.52
, , , ,		
2	\$134.96	\$172.41
2, 90803, 90810-90815, 3-90829, 90857	not in sample	not in sample
6, 90847, 90849	not in sample	not in sample
3	\$34.38	\$73.34
5, 90876, 90901	\$63.19	\$170.00
5	not in sample	not in sample
0	not in sample	not in sample
5-96117	not in sample	not in sample
0-96155	\$77.94	\$128.29
	3-90829, 90857 6, 90847, 90849 3 5, 90876, 90901 5 0 5-96117 0-96155	3-90829, 90857 not in sample   6, 90847, 90849 not in sample   3 \$34.38   5, 90876, 90901 \$63.19   5 not in sample   0 not in sample   5-96117 not in sample

#### **Behavioral Health Unit Assignment**

The TPA's behavioral health unit addresses complex care management demands often associated with workers compensation claims containing mental health components. The unit has a heavy concentration of clinical personnel, including eighteen clinical care managers, three senior psychiatric nurse reviewers, two masters-level supervisors, and a masters-level director. Experienced psychiatric nurses are in direct contact with treating providers to address treatment and return-to-work plans. The nurses utilize evidence-based treatment guidelines, internally generated mental health treatment guidelines, and nationally accepted disability duration guidelines, i.e., the *Medical Disability Advisor*.<sup>2</sup>

The behavioral health team focuses on the clinical aspects of all types of mental health claims with the goal of helping employees return to work, thereby decreasing disability durations. The unit performs the following tasks:

- discusses an effective return-to-work plan with the employee, employer, and provider;
- analyzes the employee's abilities and functional deficits related to specific job duties;
- educates the provider and claimant on expected recovery times; and
- preauthorizes treatment services, such as individual psychotherapy, psychological testing, and medication management.

#### Field Care Management Assignment

The TPA's field care management unit consists of nurses located throughout the country who offer an individualized, consultative approach to helping employees who are out on workers compensation and disability leaves return to work.

#### **Care Management Intervention**

Subsequent to care management assignment, each care manager contacted the treating provider(s) to discuss the claimant's treatment plan and projected return to work. In circumstances in which the treating provider's plan was questionable, second opinions were sought in the form of physician file reviews, peer-to-peer teleconferences, independent medical exams, or vocational rehabilitation evaluations. On some claims, multiple intervention strategies were utilized.

With respect to the original list of 128 claims, 55 claims (43 percent)

received care management services. Twenty-nine claims (23 percent) were recommended for an independent medical exam (IME). Twenty-three claims (18 percent) were reviewed by physician consultants asked to address the appropriateness of care or causality concerns.

Each care management intervention is briefly described below.

- Independent medical exam: A physician who is not involved in the claimant's treatment renders an opinion on care and compensability based on a physical or mental status exam (or both) of the claimant as well as a detailed review of the clinical file.
- **Physician file review:** A TPA physician consultant (peer reviewer) in the relevant specialty reviews the claimant's clinical record and produces a full report addressing pertinent claim issues such as appropriateness of care, causality, and work capacity.
- **Peer-to-peer teleconferences:** A TPA physician-consultant reviews the claimant's clinical file and then contacts the treating provider to discuss treatment concerns, work capacity, and causality issues.
- Vocational rehabilitation evaluation: For claimants with current or potential permanent impairments, the claims adjuster addresses the applicability and timing of a vocational rehabilitation referral and schedules it as appropriate. Vocational rehabilitation evaluations are performed by occupational and rehabilitation consultants who use transferable-skills analyses and labor market surveys to evaluate a claimant's current functional capacity in the context of job opportunities in the claimant's geographical area.

## RESULTS

The baseline and intervention periods were compared using the Student's t-test for average financial measures. The comparison measures for performance of specific procedures, however, do not tend to follow a normal distribution and thus are not appropriately analyzed using parametric statistical tests such as the Student's t-test or the analysis of variance (ANOVA). The number of specific procedures performed, regardless of how they were reimbursed, is what serves as the best comparison measure to clinically evaluate the impact of the intervention. This type of data (i.e., count data) is often skewed, showing numerous small values with occasional large ones. The maximum number possible is not known. A probability distribution that can describe this type of data is the Poisson distribution. The Poisson distribution was used to evaluate the difference between the number of procedures observed during the baseline and intervention periods by calculating 95 percent confidence intervals and the exact *p*-value.

Forty-six of the 128 claims reviewed in the pilot received behavioral health unit care management. Outcomes were captured in seven distinct claim management outcome categories. (See Exhibit 2.)

The behavioral health unit clarified the appropriateness or necessity of mental health care in 32 percent of the cases managed, resulting in a saving of \$12,320. In 18 percent of the claims managed, the claimant was found to be at maximum medical improvement. In 15 percent of the claims managed by the behavioral health unit, the mental health condition qualifying the claim for referral for nurse care management was found to be unrelated to the workers compensation injury.

Nine of the 128 claims reviewed in the pilot received field care management. Outcomes were displayed across five claim management categories. (See Exhibit 3.) The unit achieved case resolution through vocational rehabilitation (14 percent) or a release to work (29 percent) in 43 percent of the cases assigned.



#### **Reimbursement Pattern Results**

With respect to volume, 51 claimants received mental health services during the baseline period. During the intervention phase, 34 claimants were identified as receiving mental health services (see Exhibit 4).<sup>3</sup>

Baseline billing query results demonstrated that, on average, 8.7 mental health services were rendered per claimant during the six-month time period. The average reimbursement per procedure was \$136.30, resulting in an average of \$957.80 reimbursed per claimant. The company experienced a total mental health-care cost for the six-month baseline period of \$48,848.

During the intervention period, delivery of mental health services demonstrated a general downward trend as compared to the baseline period. On average, the number of procedures rendered declined from 8.7 mental health services per claimant to 6.9, representing a 20 percent decline.

A dramatic decline in the average number of psychotherapy sessions without medical management per claim (baseline and intervention period averages were 5.1 and 3.3, respectively) significantly contributed to the noted downward trend in reimbursement for mental health services. Specifically, within the baseline period, this service accounted for 59 percent of all the mental health services provided. During the interven-



tion period, this service accounted for 48 percent of the mental health services reimbursed.

With respect to impact on payments, the company experienced a 15.8 percent decrease in mental health amounts paid per claim and a 27.2 percent decrease in total billed charges for mental health services as compared to the baseline period. This latter difference was statistically significant (p<0.05).

Exhibit 5 presents the actual count of procedures performed, comparing the baseline and postintervention periods using 95 percent confidence intervals and *p*-values calculated using the Poisson probability distribution.

Changes in Utilization and Financial Measures Between Baseline and Postintervention Periods									
Measure		Baseline F Mean	Period Standard Deviation			tion Period Standard Deviation	Mean Difference	% Changes	
All Mental Health Procedures	51	8.7	9.8	34	6.9	7.8	-1.8	-20.2%	
Diagnostic Evaluation Procedures	51	0.6	0.7	34	0.4	0.6	-0.2	-29.7%	
Psychotherapy with Medical Management	51	1.3	3.4	34	1.7	4.0	0.4	27.9%	
Psychotherapy without Medical Management	51	5.1	8.8	34	3.3	5.4	-1.8	-34.4%	
Group Psychotherapy Procedures	51	1.0	3.4	34	0.5	2.9	-0.5	-47.4%	
Biofeedback Procedures	51	0.1	0.5	34	0.0	0.0	-0.1	-100.0%	
Health Behavior Procedures	51	0.1	0.5	34	0.0	0.2	-0.1	-75.0%	
Amount Paid per Claimant	51	\$957.8	\$1,013.4	34	\$806.7	\$875.8	\$(151.2)	-15.8%	
Amount Billed per Claimant	51	\$1,296.3	\$1,168.5	34	\$939.5	\$902.2	\$(356.9)	-27.5%	
Amount Paid per Mental Health Procedure	51	\$136.3	\$55.5	34	\$125.6	\$41.9	\$(10.7)	-7.8%	
Bill Charges per Mental Health Procedure	51	\$230.0	\$177.1	34	\$167.5	\$69.3	\$(62.5)	-27.2%	

The total number of mental health procedures performed during the intervention period was significantly lower than the number performed during the baseline period (p=0.005). This difference was driven by a significant decrease in the number of psychotherapy sessions without medical management during the intervention period as compared to the baseline period (p=0.000). Also, there was a marginally significant decrease in the number of group psychotherapy procedures between the two periods (p=0.099).

#### SUMMARY AND CONCLUSIONS

The use of a multidisciplinary mental care management model demonstrated a positive impact on traditional claim outcomes, such as compensability, appropriateness of mental health services, MMI, and return to work.

Concurrently, the company experienced a statistically significant decline in mental health services in the postintervention period, attributable to the pilot program. Utilization of mental health services dropped by 20 percent and, in particular, use of psychotherapy sessions without medical management declined by 34 percent and group psychotherapy

Ехнівіт 5								
Observed Frequencies for Mental Health Procedures Performed During the Baseline and Postintervention Periods								
Measure	Total Observed	Baseline Per 95% Confid Lower	iod ence Interval Upper		intervention 95% Confid Lower		p Value	
All Mental Health Procedures	442	401.75	485.19	235	205.91	267.05	0.005	
Diagnostic Evaluation Procedures	32	21.89	45.17	15	8.40	24.74	0.542	
Psychotherapy with Medical Management	68	52.81	86.21	58	44.04	74.98	0.232	
Psychotherapy without Medical Management	259	228.42	292.54	113	93.13	135.86	0.000	
Group Psychotherapy Procedures	49	36.25	67.48	17	9.90	27.22	0.099	
Biofeedback Procedures	5	1.62	11.67	0	0.00	4.67	0.699	
Health Behavior Procedures	6	2.20	13.06	1	0.03	5.57	0.632	

by 47 percent.

With respect to costs, the amount paid for mental health services per claimant declined by 16 percent and the average paid per mental health service was 8 percent lower.

As the workers compensation industry continues to grapple with escalating medical costs (9.8 percent annual inflation from 1999-2004),<sup>4</sup> innovative methodologies to ensure that both medical and indemnity benefits are wisely spent become increasingly critical.

This study affirms that a systematic and rigorous approach to managing mental health components of workers compensation claims appears to identify and eliminate unnecessary services and costs, while still producing positive results according to traditional care management resolution metrics.

Long-term clinical outcomes assessments and a formal return-on-investment analysis, both beyond the scope of this study, would be fruitful topics for future research.

## **ENDNOTES**

- Averill, P.M., et al., "Correlates of Depression in Chronic Pain Patients: A Comprehensive Evaluation," *Pain* 65 (1996): 93-100; Dworkin, R., et al., "Unraveling the Effects of Compensation, Litigation, and Employment on Treatment Response in Chronic Pain," *Pain* 23 (1985): 49-59; Waddell, G., A.K. Burton, and C.J. Main, *Screening to Identify People at Risk of Long-Term Incapacity for Work: A Conceptual and Scientific Review* (London: Royal Society of Medicine Press, 2003).
- 2. Medical Disability Advisor, 5th edition (Westminster, Colorado: Reed Group, 2005).
- 3. As previously described, 55 claimants were triaged into the care management process based upon established diagnoses or historical treatment patterns related to mental health. However, only 51 claimants actively utilized mental health services during the six-month baseline period, and only 34 claimants utilized these services during the intervention period.
- 4. Posting by Joseph Paduda on Managed Care Matters blog on June 24, 2005, at http://www.joepaduda.com/archives/000222.html.

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