RESEARCH UPDATE

Analysis of California Workers' Compensation Reforms

Part 3: Medical Provider Networks and Medical Benefit Delivery

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EXECUTIVE SUMMARY

A key element of SB 899, the workers' compensation reform bill signed by Governor Schwarzenegger in April 2004, was the introduction of Medical Provider Networks (MPNs), which were phased into operation beginning in January 2005. State lawmakers expected MPNs would boost the enlistment of preferred provider networks to treat injured workers. The legislative intent was to raise the quality of health care for injured workers while reducing costs through improved efficiency and coordination of care, use of scientifically-based medical guidelines to curb inappropriate and excessive treatment; and expanded employer medical control. A 1993 legislative attempt at introducing managed care into the California workers' compensation system through the development of preferred provider networks known as Health Care Organizations (HCOs) had been compromised by the administrative complexity of the program, and met with only limited employer involvement.

CWCI examined the medical utilization and reimbursement outcomes of SB 899 in Part I of its reform analysis series, initially published in 2007[1] then refreshed in December 2007.[2] The results confirmed significant reductions in workers' compensation medical utilization and payments for many outpatient services at 12 and 24 months post injury. Among physical therapy claims, for example, both the average number of visits and the average payments per claim for PT services at 24 months post injury fell 61 percent.

Because the 2002 – 2004 workers' compensation legislation enacted in California included many medical care and return-to-work reforms, it is impractical to attribute the observed changes to any single element of reform. However, it is likely that the establishment of MPNs contributed to the successful implementation of other reforms, including evidence-based medicine guidelines, 24-visit caps on physical medicine, mandatory second opinions for spinal surgery and mandatory utilization review.

SB 899 contained provisions to allow employees to opt out of an MPN and retain medical control of their claims by predesignating a personal physician prior to the injury; otherwise an employer that offers an MPN is granted medical control for the life of the claim. In addition, the law includes some flexibility for employees covered by MPNs, allowing them to change treating physicians within the network at any time after the first visit and an unlimited number of times; to obtain second and third medical opinions when there are disputes over treatment; and to request an independent medical review if there is still a treatment dispute after the third opinion.

1 Analysis of California Workers' Compensation Reforms, Part 1: Medical Utilization and Reimbursement Outcomes. CWCI Research Update, January 2007.

2 Analysis of California Workers' Compensation Reforms, Part 1: Medical Utilization and Reimbursement Outcomes. AY 2002 - 2005. CWCI Research Update, December 2007.

Although HCOs failed to gain widespread acceptance in the California workers' compensation system[3], public policymakers and industry professionals were optimistic that MPNs, with their simplified administrative structure and streamlined approval process, would better facilitate the integration of managed care principles that help contain workers' compensation medical care costs. Anticipating that MPNs, along with other medical care reforms enacted in 2002 and 2004, would have a significant impact on the workers' compensation system and help lower premium rates, the Legislature required that the effects of reform be monitored.[4]

In response to the mandate, the Workers' Compensation Insurance Rating Bureau requested assistance from CWCI to research specific aspects of medical benefit delivery, including network utilization rates, following the introduction of MPNs in January 2005. Using the Industry Claims Information System (ICIS) database, CWCI compiled first-year medical visit data for a large sample of pre- and post-MPN services and measured changes in the proportion of services rendered by network providers. Those results were broken out for medical services across six sections of the Official Medical Fee Schedule. The findings show that pre-2005 reform PPO networks and post-reform MPNs played an increasing role in California workers' compensation medical benefit delivery between 2002 and 2006.

Key findings include:

- The use of network providers increased from one third of the first-year outpatient treatment visits on accident year (AY) 2002 claims to nearly half of the first-year visits on AY 2004 claims, then continued to grow following the advent of MPNs, increasing to almost 62 percent of first year outpatient visits in AY 2005.
- The network utilization rate for first-year evaluation and management (E&M) services rose from about 57 percent on AY 2002 claims to 62 percent on AY 2004 claims. The trend accelerated with the introduction of MPNs, with network providers used in nearly 73 percent of first-year E&M visits on AY 2005 claims.
- Use of networks for first-year physical therapy increased steadily, rising from 25 percent of AY 2002 PT visits to 39 percent of the visits in AY 2004, before climbing to just over half of all first-year PT visits after MPNs became available in AY 2005. At the same time, the use of network providers for chiropractic manipulation also increased dramatically. While less than 9 percent of first-year chiropractic manipulation visits in AY 2002 involved network providers, that rate climbed to just under 12 percent by AY 2004, then nearly tripled to about 34 percent in AY 2005 – due at least in part to the greater availability of chiropractors in MPNs than in pre-reform PPO networks.

SB 899 extended medical control for employers that offer MPNs from the pre-reform 30-day window to the life of the claim. To assess how much of the increase in network use may have been due to this expansion of employer medical control the study also measured changes in the proportion of visits to network providers within and beyond 30 days of injury. Across all six treatment categories, the increase in network utilization was greatest for visits beyond the first 30 days after injury, which suggests a strong link between the growth in the network visits during the first year of treatment and the expansion of employer medical control. On the other hand, because MPNs are still relatively new to California workers' compensation, and this study only included data on claims with injury dates through middle of 2006, the authors urge caution in interpreting and applying these results.

BACKGROUND

Prior to 2005, employers in California could direct control over medical care for 30 days after the date of injury. This was typically accomplished through the use of preferred provider organizations (PPO). There were exceptions. First, an employee had the right to predesignate a personal physician any time prior to an injury. Also, an employer or insurance carrier could establish a Health Care Organization which extended the period of medical control to up to 180 days after an injury and limited care to a pre-specified panel of medical providers.

SB 899 did not remove an employer's right to exert 30-day control, nor did it eliminate Health Care Organizations. It did, however, modify the rules for predesignating a personal physician, and allowed employers to extend their workers' compensation medical control by utilizing MPNs. For treatment on or after 1/1/2005, SB 899 allows employers and insurers to establish or modify MPNs (Labor Code section

3 Nearly a decade after they were introduced, the California Commission on Health, Safety and Workers' Compensation reported a total of 14 certified HCOs in the state. (CHSWC 2002 – 2003 Annual Report, Calif. Dept. of Industrial Relations, December 2003). In contrast, the California Division of Workers' Compensation reported in early 2006 that over 1,100 MPN applications had been approved.

4 LC 138.65

4616). The networks must include a mix of medical providers that includes physicians who primarily treat occupational injuries as well as physicians who treat primarily treat non-occupational injuries. The statute specifies that the goal is for at least 25 percent of a network's physicians to primarily treat non-occupational injuries.

All care provided by network providers must be consistent with the Medical Treatment Utilization Schedule (MTUS) adopted by the Administrative Director of the Division of Workers' Compensation, or until its adoption, the American College of Occupational and Environmental Medicine (ACOEM) treatment guidelines. Under SB 899, an employer offering an MPN arranges an injured worker's initial medical evaluation, after which the employee may choose another network physician. If an employee disputes an MPN provider's diagnosis or treatment, the employee may obtain a second and third opinion from within the network. If the dispute still persists, the employee may appeal to an Independent Medical Reviewer (IMR) assigned by the Administrative Director, who will issue an opinion on whether the disputed medical services are consistent with the MTUS/ACOEM guidelines. If so, the worker may receive those services from either within or outside the network.

The California Division of Workers' Compensation has approved more than 1,100 medical provider networks since January 2005. MPNs must meet specific access standards to ensure that injured workers have a choice of primary and specialty providers within a reasonable distance from their homes or worksites. Provider networks range in size from very small (less than 1000 providers) to very large (greater than 50,000 providers).

DATA & METHODS

This analysis measures changes in the percentage of injured worker outpatient treatment visits to network providers by timeframe and type of medical service. The study examines provider-based medical treatment data from AY 2002 through AY 2006 claims, with "visits" identified through a unique combination of the billing provider tax ID number and the date of service. The analysis generates the following:

- Network utilization rates for visits within the first 30 days of injury
- Network utilization rates for visits after the first 30 days of injury
- Overall utilization rates for three pre-MPN accident years (2002 – 2004) and two post-MPN accident years (AY 2005 and 2006); and
- Network utilization rates by type of medical service, with results broken out across six common fee schedule categories: Evaluation and Management, Surgery (excluding injections), Radiology, Medicine Section services, Physical Therapy and Chiropractic Manipulation.

Claim Sample

For this analysis, the Institute used it ICIS database to compile data from 1,005,769 California workers' compensation claims with 2002 through 2006 dates of injury. These claims involved a total of nearly 15.2 million visits for outpatient, provider-based medical treatment and resulted in nearly $1.5 billion in payments. Table 1 summarizes the number of claims and associated medical visits and payments used in the analysis and sorts the data into pre-MPN (AY 2002 – AY 2004) and post-MPN (AY 2005 – AY 2006) categories.

Table 1: Distribution of Claims, Visits & Payments – Network Study Sample

Year of Injury	Number of Claims	Percent of Claims	Number of Visits	Percent of Visits	$ Paid	Percent of Payments
2002 (Pre-MPN)	271,110	27.0%	5,357,900	35.4%	$472,011,121	32.1%
2003 (Pre-MPN)	240,281	23.9%	4,444,737	29.3%	$408,466,932	27.8%
2004 (Pre- MPN)	230,764	22.9%	2,779,432	18.3%	$299,633,148	20.4%
2005 (Post- MPN)	193,571	19.2%	1,957,129	12.9%	$221,857,582	15.1%
2006 (Post- MPN)	70,043	7.0%	619,284	4.1%	$68,234,460	4.6%
Total	**1,005,769**	**100.0%**	**15,158,482**	**100.0%**	**$1,470,203,243**	**100.0%**

To assure comparable treatment utilization data from the five different accident years, visits for each claim were developed at 12 months post date of injury.[5] The medical visit data also were grouped into four categories based on network versus non-network providers and service date (whether the treatment was rendered within the first 30 days after injury or more than 30 days after injury.)

Network Identification

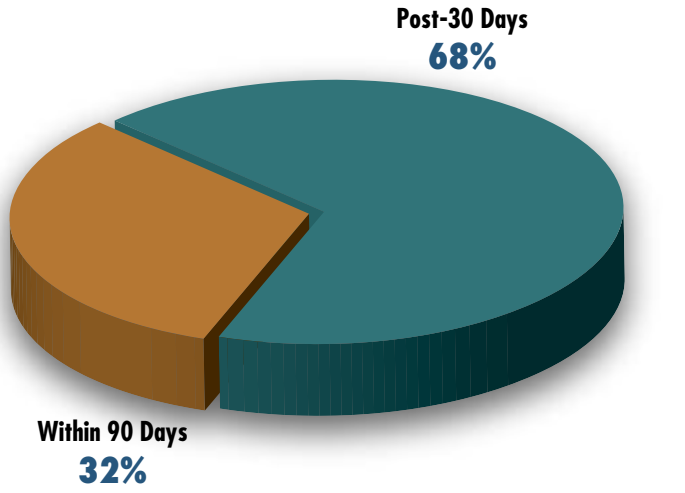
The dataset of medical services was compiled from claims information submitted by 11 national and regional workers' compensation insurance carriers and large self-insured organizations. Each data contributing organization used a PPO network in the 2002 – 2004 timeframe, as well as an MPN in 2005 and 2006. MPNs were phased in at various points across the 2005 calendar period, so to allow a uniform comparison of the 2002 – 2004 PPO utilization to 2005 - 2006 MPN utilization, the authors counted all visits to MPN physicians for any date of service in 2005 and 2006, regardless of the actual MPN approval or implementation date. For example, a January 1, 2005 office visit to "Dr. Jones," a provider in the MPN used by Payor #1 which was approved by the California Division of Workers' Compensation on March 1, 2005 and implemented on June 1, 2005 would count as a "network" visit.

RESULTS

Visits Within 30 Days of Injury and Post 30 Days of Injury

One of the key changes brought about through the introduction of medical provider networks in California workers' compensation was the expansion of payor control over medical treatment. As mentioned above, before MPNs, a payor's ability to channel patients to physicians was limited to the first 30 days after injury (or up to 180 days for HCOs), but under SB 899, payors with MPNs can direct care for the life of the claim. Chart 1 shows the percentage of first-year outpatient physician-based treatment visits[6] from the AY 2002 – 2006 claim sample that took place in the first 30 days following the injury, and the percentage that occurred after the first 30 days.

Chart 1: Timing of 1st Year Physician-Based Treatment Visits Percent Within 30 Days of Injury vs. Post 30 Days



One third of all first-year physician-based medical service visits from the claim sample occurred within 30 days of the injury, while two thirds occurred between the 31st day and one year post injury.

Network Penetration

Table 2 compares pre-MPN (AY 2002 – 2004) and post-MPN (AY 2005 - 2006) network utilization rates and breaks out the results to show the proportion of visits that took place within and beyond 30 days of the injury date.

Table 2: Pre- Vs. Post-MPN Network Utilization Rates 1st-Year Physician-Based Outpatient Visits

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
% Visits <=30 Days	63.3%	65.2%	67.5%	71.1%	72.2%
% Visits >30 Days	23.4%	24.2%	36.5%	53.8%	
% All 1st-Year Visits	33.4%	34.4%	48.9%	61.7%	

Aggregate results compiled from all six treatment categories included in the study show that overall, the use of network providers to treat injured workers in the first year after injury rose sharply during the pre-MPN period, climbing from about one third of the visits for AY 2002 claims to just under half of the visits for AY 2004 claims, then continued to rise after MPNs were in place, increasing to nearly 62 percent of the AY 2005 visits. Table 2 also reveals that most of the increase in

5 Because medical visit data in the ICIS data set was current through November 2006, the sample of claims was cut off after June 2006. The claims in the sample with injury dates after November 2005 therefore have less than 12 months of accumulated medical data, so the measurements and comparisons of network utilization and payment for AY 2006 claims are limited to claims experience within 30 days of injury.

6 These include visits to physical therapists, as well as to medical doctors, doctors of osteopathy, chiropractors and other "physicians" as defined by Labor Code § 3209.3.

network utilization during the first year resulted from greater use of networks for visits beyond the first month. While the network utilization rate for treatment visits in the first 30 days following an injury rose from 63 percent in AY 2002 to 72 percent in AY 2006, the percentage of post-30 day visits involving network providers more than doubled from 23 percent in AY 2002 to nearly 54 percent in AY 2005.

Table 3 shows the proportion of payments for first-year visits that were made to network providers for each of the five accident years studied. The payment results are also broken out for services rendered within and beyond 30 days of the injury date.

Table 3: Percent of 1st Year Physician-Based Outpatient Service Payments to Networks: Pre- Vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
% Payments for Visits <=30 Days	56.3%	58.0%	56.9%	59.7%	61.7%
% Payments for Visits >30 Days	24.8%	24.5%	30.5%	44.9%	
% Payments for All 1st Year Visits	32.0%	31.9%	39.2%	50.7%	

The growth pattern noted for network payments tracks with the growth pattern for network utilization. Overall, payments to network providers climbed from about one third of all reimbursements for first-year visits on AY 2002 claims to more than half of all dollars paid for first-year visits on AY 2005 claims. Once again, that growth was primarily driven by the increase use of network providers for services beyond the first 30 days. Networks accounted for less than one quarter of the payments for AY 2002 visits that took place more than a month after injury, but that percentage climbed to more than 30 percent in AY 2004, then grew to nearly 45 percent in AY 2005. Payments to networks for visits within the first 30 days of injury also increased, but to a much smaller degree, ranging between 56 and 58 percent of the pre-MPN reimbursements, then climbing to just under 62 percent in AY 2006.

NETWORK VISITS BY FEE SCHEDULE SECTION

As noted in table 2, the most recent post-MPN data on first-year treatment of injured workers shows that network providers now account for more than 70 percent of the visits for physician-based services within the first month of injury and over half of the visits beyond the first 30 days, for an overall network utilization rate of nearly 62 percent. However, the use of networks varies by type of service. To gauge the extent to which networks are being used for various types of treatment and how that has changed since the introduction of MPNs, the Institute calculated the network utilization rates for each of the six treatment categories included in the study across each of the five accident years. The following sections compare the pre- and post-MPN network utilization rates and track changes in the proportion of payments to networks for each of the six treatment categories.

Evaluation & Management

Evaluation & Management (E&M) treatments are typical office visits for new and established patients that range from brief to extended patient encounters. Table 4 shows the network utilization rates for E&M visits during the first 12 months after the date of injury for AY 2002 through AY 2006 claims.

Table 4: Percentage of 1st Year E&M Visits to Network Providers -- Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
% Visits <=30 Days	72.4%	74.3%	74.1%	75.6%	75.6%
% Visits >30 Days	43.6%	43.0%	49.7%	69.1%	
% All 1st Year Visits	57.2%	57.0%	62.1%	72.6%	

Network utilization for E&M services rendered to injured workers during the first 30 days following an injury has been consistently high. Table 4 shows that for E&M visits within the initial 30 days of the injury, the network utilization rate edged up from about 72 percent in AY 2002 to 74 percent in AY 2004, then increased slightly to about 76 percent for AY 2005 and 2006, after MPNs were introduced.

The use of networks for E&M visits after the first 30 days showed more significant growth, increasing from less than 44 percent in AY 2002 to nearly 50 percent in AY 2004, then climbing to more than 69 percent once MPNs began operations in AY 2005. As a result, the overall network utilization

rate for first-year E&M visits grew from about 57 percent in AY 2002 to nearly 73 percent in AY 2005 – a relative increase of 27 percent.

Table 5 tracks the changes in the proportion of evaluation and management payments to networks over the same period.

Table 5: Percentage of 1st Year E&M Visit Payments to Network Providers Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
% Pmts for Visits <=30 Days	66.3%	68.4%	66.6%	69.6%	70.7%
% Pmts for Visits >30 Days	36.5%	35.4%	41.7%	65.6%	
% Pmts for All 1st Visits	49.3%	48.9%	54.2%	67.9%	

E&M payment patterns to network providers were similar to the visit patterns, but the relative percentages were consistently lower. This difference is likely due in part to network discount rates and changes in the mix of limited to extended office visits during the five-year span of the study.

SURGERY

The surgery section of the fee schedule includes a wide range of services including arthroscopies, carpal tunnel release and back procedures. Surgical injections, while listed in the surgery section, were excluded from the study sample. Table 6 shows the network utilization rates for surgical visits.

Table 6: Percentage of 1st Year Surgery Visits to Network Providers --Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
Visits <=30 Days	68.0%	69.7%	67.1%	72.3%	74.5%
% Visits >30 Days	37.2%	38.3%	41.8%	57.8%	
% All 1st Year Visits `	52.5%	53.7%	56.4%	66.7%	

Prior to the introduction of MPNs, the network utilization rate for surgery visits in the first 30 days was relatively stable, ranging between 67 and 70 percent. After the MPNs took effect, the rate climbed to 72 percent in AY 2005 and to nearly 75 percent in AY 2006. Similarly, the use of networks for surgery visits after the first 30 days showed only minor changes during the pre-MPN period, with networks utilization ranging between 37 and 42 percent for accident years 2002 to 2004, before climbing sharply to nearly 58 percent in AY 2005. Thus, the overall network utilization rate for first-year surgery services grew from just over half of the visits in AY 2002 to two-thirds of the visits in AY 2005 – a relative increase of 27 percent -- primarily driven by the increased use of networks after the first 30 days, most of which occurred after MPNs were introduced in 2005.

Table 7 shows the changes in the proportion of surgery payments to networks across the pre- and post-MPN periods.

Table 7: Percentage of 1st Year Surgery Visit Payments to Network Providers – Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
% Payments for Visits <=30 Days	41.8%	43.3%	38.2%	43.3%	45.8%
% Payments for Visits >30 Days	35.6%	31.1%	30.3%	40.9%	
% Payments for All 1st Year Visits	37.2%	34.0%	32.5%	41.7%	

Fluctuations in network reimbursements for surgery services deviated slightly from the network utilization pattern for these services. While the percentage of payments to networks for surgery visits within 30 days of injury moved in tandem with changes in utilization, (fluctuating slightly from AY 2002 to AY 2004, then increasing in the post-MPN period), the percentage of payments to networks for surgery visits after 30 days dwindled from nearly 36 percent in AY 2002 to about 30 percent in AY 2004, then jumped to nearly 41 percent with the advent of MPNs in 2005. This same pattern was noted in the payments for all first-year surgery visits, where the percentage going to networks declined steadily from about 37 percent in AY 2002 to 32.5 percent in AY 2004, then climbed to almost 42 percent in AY 2005 – a relative increase of 28 percent in the first year MPNs became available.

RADIOLOGY

Radiology services include medical imaging technologies such as x-rays, CT scans, and MRIs used to diagnose injuries and establish surgical pathways. Table 8 shows the network utilization rates for pre- and post-MPN radiology services.

Table 8: Percentage of 1st Year Radiology Visits to Network Providers -- Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
Visits <=30 Days	62.0%	63.7%	62.5%	63.4%	64.5%
% Visits >30 Days	31.8%	31.8%	33.0%	47.2%	
% All 1st Year Visits	47.8%	48.2%	49.7%	57.1%	

The network utilization rate for radiology services in the first 30 days following an injury has been remarkably stable, even after the introduction of MPNs, ranging from 62 percent in AY 2002 to 64.5 percent in AY 2006. In contrast, the use of networks for radiology after the first 30 days increased only marginally in the three years prior to the introduction of MPNs, but then climbed from about one third of the visits to almost half of the visits once the MPNs began to operate in 2005. Likewise, the network utilization rate for all first-year radiology visits showed only modest increases between AY 2002 and AY 2004, with networks accounting for just under half of the radiology visits until MPNs began to operate in 2005, at which point the network utilization rate rose to 57 percent – a relative increase of 14.9 percent.

Table 9 measures the changes in the percentage of payments to networks for first-year radiology visits across the pre- and post-MPN periods.

Table 9: Percentage of 1st Year Radiology Visit Payments to Network Providers – Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
% Payments for Visits <=30 Days	52.2%	53.1%	52.2%	50.1%	53.6%
% Payments for Visits >30 Days	21.5%	21.0%	21.0%	29.8%	
% Payments for All 1st Year Visits	29.7%	29.4%	30.7%	37.6%	

Payments to network providers showed a similar development pattern to the percentage of visits to network providers, but with significantly lower percentages. Throughout the pre- and post-MPN periods networks received just over half of the payments for radiology services rendered during the first month following an injury. During the pre-MPN period, the networks consistently accounted for about 21 percent of the payments for radiology visits that occurred after the first month, but that proportion climbed to nearly 30 percent in AY 2005. Similarly, the networks' share of the payments for all first-year radiology visits held steady at around 30 percent until the MPNs took effect in 2005, at which point the networks' share increased to nearly 38 percent – a relative increase of 22 percent.

MEDICINE SECTION SERVICES

The Medicine section of the Official Medical Fee Schedule includes such common procedures as psychological testing, sensory or mixed nerve studies, and biofeedback.

Table 10 shows the pre- and post-MPN network utilization rates for services covered in the Medicine section.

Table 10: Percentage of 1st Year Medicine Section Visits to Network Providers -- Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
Visits <=30 Days	69.3%	71.7%	72.4%	71.5%	71.1%
% Visits >30 Days	24.9%	25.3%	32.1%	51.8%	
% All 1st Year Visits	41.1%	42.0%	50.6%	63.2%	

The network utilization rate for Medicine section services within the first 30 days of injury has been fairly stable throughout the pre- and post-MPN periods, ranging between 69 and 72 percent across the five-year span of the study, with a marginal decline noted after MPNs took effect in 2005. On the other hand, the network utilization rate for Medicine section visits after the first 30 days increased from about a quarter of the visits in 2002 and 2003 to nearly one third of the AY 2004 visits, then following the introduction of the MPNs in 2005, the rate climbed to nearly 52 percent. That fueled an increase in the overall network utilization rate for first-year Medicine section services, which rose from 41 percent in AY 2002 to more than 63 percent in AY 2005 – a relative increase of 54 percent across the 4-year period, about half of which occurred between 2004 and 2005 -- the first year MPNs were introduced.

Table 11 shows the changes in the percentage of payments for first-year medicine section services during the five-year span of the study.

Table 11: Percentage of 1st Year Medicine Section Visit Payments to Network Providers – Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
Payments for Visits <=30 Days	46.1%	51.5%	53.6%	57.5%	58.6%
% Payments for Visits >30 Days	18.8%	18.9%	21.5%	40.3%	
% Payments for All 1st Year Visits	21.3%	21.8%	25.3%	43.7%	

The growth trends in network payments for Medicine section services tracked with the utilization trends, though again, the percentage changes were less. The proportion of Medicine section dollars flowing to networks increased only slightly in the pre-MPN years, then climbed sharply with the introduction of the Medical Provider Networks in 2005. The most notable increase was in the payments for Medicine section services rendered after the first 30 days, where the percentage of payments to networks nearly doubled from 21.5 percent in AY 2004 to 40.3 percent in AY 2005. This, in turn, drove up the overall percentage of first-year Medicine section payments to networks, which more than doubled from about 21 percent in AY 2002 to nearly 44 percent in AY 2005.

PHYSICAL THERAPY

Physical therapy (PT) is the most common medical service in California workers' compensation, though prior studies have documented significant reductions in the use of these services since the implementation of the 2004 reforms, which included not only MPNs, but utilization review requirements, the adoption of a medical treatment utilization schedule, and 24-visit caps on physical therapy and chiropractic care. Table 12 shows the pre- and post-MPN network utilization rates for physical therapy.

Table 12: Percentage of 1st Year Physical Therapy Visits to Network Providers -- Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
Visits <=30 Days	53.5%	55.2%	60.6%	66.6%	70.0%
% Visits >30 Days	20.9%	21.5%	32.4%	44.1%	
% All 1st Year Visits	25.0%	25.8%	39.1%	50.1%	

During the pre-MPN period, the use of network providers for PT services in the first 30 days increased from just over half of all visits in AY 2002 to more than 60 percent of the visits in AY 2004. After MPNs began operations in 2005, the trend toward network providers continued to grow, with networks accounting for 2 out of 3 first-month PT visits in AY 2005, and 70 percent of the first-month visits in AY 2006. Even sharper increases were noted in the growth of network utilization for PT visits beyond 30 days post injury. The pre-reform data show the use of networks for these PT visits climbed from about 1 in 5 visits in AY 2002 and 2003 to nearly 1 in 3 visits in AY 2004, then increased again to 44 percent after the opening of MPNs in AY 2005 – more than double the rate from two years earlier.

Overall, the percentage of total first-year PT visits to network providers increased from about a quarter of the visits in AY 2002 and 2003 to more than 39 percent of the AY 2004 visits. In 2005, PT visits associated with network providers again increased significantly to 50.1 percent – double the AY 2002 rate and a relative increase of 28 percent from the AY 2004 rate.

Table 13 displays the changes in the proportion of payments to networks for first-year physical therapy visits across the pre- and post-MPN periods.

Table 13: Percentage of 1st Year Physical Therapy Visit Payments to Network Providers – Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
Payments for Visits <=30 Days	56.0%	57.9%	62.6%	67.6%	70.0%
% Payments for Visits >30 Days	21.7%	22.0%	31.7%	41.4%	
% All Payments for 1st Year Visits	26.0%	26.4%	38.7%	48.1%	

Reimbursements to networks have grown to 70 percent of all payments for PT services within the first month; more than 41 percent of the payments for PT services beyond the first 30 days, and just under half of the payments for PT visits in the first year following injury. The growth in payments to network providers has followed the network utilization pattern, with similar relative percentages in each year and for every category of payment and visit. This likely indicates that physical therapy networks are not as often associated with discounts, even when accessed as part of a PPO or Medical Provider Network.

CHIROPRACTIC MANIPULATION

Concerns regarding the over-utilization of chiropractic care in treating injured workers led state lawmakers to include a 24-visit cap on chiropractic treatment in SB 899. Earlier Institute studies have shown that this, along with the introduction of MPNs and the other medical reforms included in the 2004 reform bill, were associated with dramatic reductions in the average number of chiropractic manipulation visits. Preliminary data published by the Institute last June noted that prior to the introduction of MPNs, only a small percentage of chiropractic manipulation visits involved network providers. That percentage increased sharply after the MPNs began operations in 2005, however, as the MPN regulations adopted by the state following enactment of SB 899 required the networks to provide access to a number of medical specialists, including chiropractors. Table 14 displays the updated figures on pre- and post-MPN network utilization rates for chiropractic manipulation.

Table 14: Percentage of 1st Year Chiropractic Manipulation Visits to Network Providers -- Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
Visits <=30 Days	15.4%	15.9%	18.2%	33.8%	40.8%
% Visits >30 Days	8.0%	7.9%	10.4%	33.4%	
% All 1st Year Visits	8.6%	8.6%	11.8%	33.5%	

During the pre-MPN period, networks accounted for between 15 and 18 percent of the chiropractic manipulation visits within the first 30 days of an injury, though that proportion doubled to more than one third of all visits in the first year after MPNs took effect, and climbed to nearly 41 percent in AY 2006. Likewise the pre-MPN network utilization rate for chiropractic manipulation visits after the first 30 days was only about 8 to 10 percent, but that rate more than tripled to one third of all post-30 day visits after the MPNs were introduced.

Overall, the network utilization rate for chiropractic manipulation increased from less than 9 percent of the first-year visits in AY 2002 to just under 12 percent in AY 2004, then nearly tripled to more than 33 percent after MPNs were introduced in AY 2005.

Table 15 notes the changes in the proportion of first-year chiropractic manipulation payments to networks across the pre- and post-MPN periods.

Table 15: Percentage of 1st Year Chiropractic Manipulation Visit Payments to Network Providers – Pre- vs. Post-MPN

	Pre-MPN			Post-MPN	
	AY 2002	AY 2003	AY 2004	AY 2005	AY 2006
Payments for Visits <=30 Days	16.4%	16.1%	16.6%	32.1%	39.9%
% Payments for Visits >30 Days	9.1%	8.1%	10.3%	32.2%	
% Payments for All 1st-Year Visits	9.6%	8.8%	11.4%	32.1%	

In a pattern similar to physical medicine, the reimbursements to network providers for first-year chiropractic manipulation visits were consistent with the changes in network utilization across each of the years and each of the visit time frames. Payments to networks for first-month chiropractic manipulation visits doubled from about 16 percent in the pre-MPN period to nearly one third of the payments in AY 2005, then continued to increase to almost 40 percent of the payments in AY 2006. The growth in the proportion of chiropractic manipulation payments for visits after the first 30 days, as well as the overall growth rate in payments to networks for all first-year chiropractic manipulation visits, was even more dramatic, increasing from less than 10 percent of total reimbursements in AY 2002 to nearly one third of the payments after MPNs took effect in AY 2005.

SUMMARY

Preliminary analysis of changes in network use in the California workers' compensation system suggests that pre-reform PPO networks as well as post-reform MPNs played an increasing role in medical benefit delivery between accident years 2002 and 2006. For many types of treatment, network utilization began to increase between accident years 2002 and 2004. With the introduction of medical provider networks in 2005, network use increased in all six of the major treatment categories included in this study, and network utilization continued to grow in 2006. The increase in network utilization since the advent of MPNs has been greatest for visits beyond the first 30 days after injury. Given that MPNs extended employer medical control from 30 days to the life of the claim, the use of networks for treatment beyond 30 days from the date of injury clearly offered the greatest opportunities to affect the course of treatment and produce savings, and the results of this analysis confirm that that is precisely where the networks are having the greatest impact. The extent to which that will continue remains to be seen, as workers' compensation medical benefit delivery continues to evolve, and MPNs are still relatively new to workers' compensation. Therefore, the authors urge caution in interpreting and applying these early results.

RESEARCH SERIES

This research update is part of an annual series of analyses initiated by CWCI in 2006 to track changes in various aspects of the California workers' compensation system following implementation of the 2002 – 2004 legislative reforms. The current 4-part series is based on accident year 2002-2006 claims data, and this is the third report in the series. The complete series will encompass the following topics:

- **Part I: Medical Utilization & Reimbursement**
- **Part II: Temporary Disability**
- **Part III: Medical Provider Networks**
- **Part IV: Medical Cost Containment**

Part 4 of the series is scheduled to be released in March 2008, and as noted above, will examine updated data and present new findings on issues surrounding medical cost containment.

ABOUT CWCI

The California Workers' Compensation Institute, incorporated in 1964, is a private, non-profit organization of insurers and self-insured employers conducting and communicating research and analyses to improve the California workers' compensation system. Institute members include insurers that collectively write more than 87 percent of California workers' compensation direct written premium, as well as many of the largest public and private self-insured employers in the state.

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