



Minnesota Department of Labor and Industry

Workers' Compensation Medical Cost Reimbursement Study

A Study of Medical Cost Reimbursement in Minnesota's
Workers' Compensation System and Possible Reforms and
Barriers

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TABLE OF CONTENTS

Executive Summary	2
Introduction	3
Reimbursement Methodology	4
Payment Mechanics	7
Dispute Costs	11
Possible Reforms and Barriers.....	16
1. Repeal <i>Spaeth</i>	16
2. Limit Implant Mark-ups	17
3. Change Minnesota’s Reimbursement System.....	17
4. Curtail Late Payment of Medical Bills	19
5. Enforce Laws Requiring Electronic Filing of Medical Records	19
6. Insurer Administrative Costs	20
Appendix A: Current Levels and Trends in Minnesota’s Workers’ Compensation System	21
Appendix B: Survey Procedures	26
Appendix C: Survey Questions	28
Appendix D: How Workers’ Compensation Medical Care Differs from Other Medical Care Systems	40
Appendix E: Fee Regulation Systems in Workers’ Compensation and Medicaid	42
Appendix F: Inpatient Charges and Payment Variations in Medicare.....	46

EXECUTIVE SUMMARY

This study was conducted by the Department of Labor and Industry (DLI) pursuant to a directive from the Minnesota Legislature. DLI's charge was to study various aspects of the workers' compensation carrier and health care provider reimbursement system, including potential reforms and barriers.

DLI surveyed hospitals, ambulatory surgery centers (ASCs), insurance companies and self-insured employers to obtain data regarding the reimbursement system. DLI requested information about: bill submission; the timeliness of payments; the amount of charges and payments for certain procedures common in workers' compensation; the price and mark-up of surgical implants; the number and type of disputes; and the costs related to the billing, collection and payment of medical bills.

The data provided was analyzed and summarized by DLI staff members. That data, together with findings from other studies relevant to the payment of workers' compensation medical costs, is discussed in this report. DLI's findings include the following.

- ♦ Hospitals received an average of 3 percent to 35 percent more from workers' compensation payers than they did from commercial health insurers for performing the same, inpatient procedures. ASCs received an average of 32 percent more.
- ♦ Hospitals generally refused to provide information about the amounts they marked-up surgical implants; insurance company-supplied documents revealed mark-ups of up to 500 percent.
- ♦ Electronic transmission and payment of medical bills has been slow to take hold in Minnesota's workers' compensation system.
- ♦ Bill-reviewers are the largest cost component of insurers' workers' compensation medical payment system.
- ♦ Insurers reported a relatively small number of the payments they made for medical bills were disputed. However, hospitals reported they disputed the amount of payment on more than half of their bills for inpatient treatment.
- ♦ Hospitals reported that only 14 percent of their nondisputed inpatient bills were paid within 30 days; insurers reported paying 95 percent of all nondisputed hospital inpatient bills within 30 days.

DLI could not reconcile some of the data provided by hospitals, insurers and ASCs. It was clear from the data, however, that Minnesota's approach to paying workers' compensation medical costs does not provide any control over services not covered by a fee schedule. Minnesota's current system: incentivizes higher medical charges; results in higher costs to payers because of line-by-line bill review; creates delays in payment; and creates an environment ripe for disputes.

Possible reforms are discussed in the report, including changing Minnesota's workers' compensation medical cost reimbursement system to one where providers are paid according to diagnosis and patient characteristics rather than charges. Potential barriers to suggested reforms are also presented.

INTRODUCTION

This study was conducted pursuant to 2013 Minnesota Laws 377, which directed the Minnesota Department of Labor and Industry (DLI) to “study the effectiveness and costs of potential reforms and barriers within the workers’ compensation carrier and health care provider system, including, but not limited to, carrier administrative costs, prompt payment, uniform claim components,¹ and the effect on provider reimbursements and injured worker copayments of implementing the subjects studied.”

Medical benefits represent the single largest cost component of Minnesota’s workers’ compensation system.² In 2011, medical payments totaled \$524 million, accounting for 56 percent of Minnesota workers’ compensation payments, with the remaining 44 percent representing indemnity benefit payments to injured workers.³ Medical costs rose rapidly between 1997 and 2003, and then more slowly from 2003 to 2010.⁴ Overall, average medical benefits were up 111 percent in 2010 relative to 1997.⁵ Appendix A discusses in greater detail recent trends in Minnesota’s workers’ compensation medical costs.

Prior to commencing the study, DLI met with stakeholders to obtain input and information relevant to the study. Among others, DLI met with medical clinics, physicians, hospitals, ambulatory surgery centers (ASCs), radiology facilities, chiropractors, insurance companies and physical therapists. DLI recognized the scope of the study had to be restricted to provide meaningful results within the mandated time frame. Accordingly, this study is focused on medical services that are not covered by a fee schedule – specifically, hospital inpatient services and certain outpatient services provided by hospitals and ASCs. In addition, data was specifically requested regarding surgical implants, because their reimbursement has been a significant source of contention between providers and payers.

DLI sent survey questionnaires to 24 hospitals, 20 ASCs, 20 workers’ compensation insurance carriers and 20 self-insured employers to gather data for the study.⁶ The department received responses from 73 percent of all recipients. Appendix B describes the survey procedure; Appendix C includes the survey questionnaires. Unless otherwise noted, the data referenced in this report was collected in response to the questionnaires.

Three significant aspects of the workers’ compensation carrier and health care provider system are discussed in the report: (1) the billing and payment mechanisms used by providers and payers; (2) the costs resulting from disputes or “friction” between providers and payers; and (3) the statutory methodology by which reimbursements for medical care are made. The discussion includes a general analysis of the impact each area has on costs within the workers’ compensation system. The report then discusses potential cost containment reforms and identifies some of the barriers to implementing those reforms.

¹Because Minnesota Statutes section 176.135, subd. 7, currently mandates uniform claim components in the transmission of electronic medical billing (which is also mandated but not consistently implemented, as discussed elsewhere in this report), DLI did not further study the creation of uniform claim components.

²*Minnesota Workers’ Compensation System Report, 2011.*

³ *Id.*; note the amount of indemnity benefits includes vocational rehabilitation benefits.

⁴*Id.*

⁵*Id.*

⁶When the terms “payers,” “insurers” and “insurance companies” are used in this report, they refer to both insurance companies and self-insured employers unless the context indicates otherwise.

REIMBURSEMENT METHODOLOGY

Background – current reimbursement system⁷

Medical providers serving injured workers in Minnesota are generally reimbursed for their services in one of two ways – pursuant to a fee schedule⁸ or based on the provider’s “usual and customary” charges. A fee schedule establishes a payer’s maximum liability for specific medical services, articles and supplies. Fee schedules generally cover professional and diagnostic services, including physician office visits, surgeon services, physical therapy, radiology and chiropractic manipulations.

Medical providers’ usual and customary charge or the prevailing charge⁹ is the basis for reimbursement of all other services, including facility fees¹⁰ and inpatient hospital treatment.¹¹ Minnesota law provides small hospitals – those with 100 or fewer beds – are to be reimbursed at 100 percent of their usual and customary charges.¹² The fee for all other services that are not covered by a fee schedule, including inpatient services provided by hospitals with more than 100 beds, is 85 percent of the provider’s usual and customary charge or 85 percent of the prevailing charge for similar treatment, whichever is lower.¹³

There are some fundamental differences between medical care provided through workers’ compensation and that provided through other health care systems. For example, treatment for work injuries is denied more often than treatment under a group health policy based on the workers’ compensation payer’s review about whether the treatment is reasonable, necessary and related to the work injury. A more complete discussion of the differences between medical care provided under the two systems is attached as Appendix D.

Effects of charge-based reimbursement

The fee schedule has controlled increases in professional service fees and the greatest increases in overall workers’ compensation medical costs have been in inpatient hospital costs and certain outpatient charges (which are not subject to a fee schedule). In 2012, DLI retained CGI Federal Inc. (CGI) to study reimbursement methodologies used by other states’ workers’ compensation and government programs, to identify potential cost-saving alternatives.¹⁴

CGI identified several effects of the charge-based reimbursement used in Minnesota’s workers’ compensation system for services not covered by a fee schedule. First, and most significant, CGI explained charge-based systems provide no control of costs. CGI noted that,

⁷Much of the material in this section is presented in greater detail in Appendix C.

⁸For purposes of this report, the term “fee schedule” includes the formula that applies to pharmacy charges by certain medical providers. *See* Minnesota Rules Part 5221.4070.

⁹A “prevailing charge” is the 75th percentile of the usual and customary charges in the previous calendar-year for a service, article or supply, provided the database calculating the charge meets specified requirements. *See* Minnesota Rules Part 5221.0500, subp. 2.

¹⁰Facility fees are fees charged by ASCs and hospitals to reimburse them for general costs relating to the use of the facility where a procedure is performed or treatment provided.

¹¹Minnesota Statutes section 176.136, subd. 1b (2013 Supp.).

¹²*Id.*

¹³*Id.* *See also*, Minnesota Rules Part 5221.0500, subp.2.

¹⁴CGI Federal, Inc., “Report on Workers’ Compensation Reimbursement Methodologies” (CGI Report); available at www.dli.mn.gov/WC/Pdf/cgi_federal_report2012.pdf.

nationwide, hospital charges are three times higher than hospital costs.¹⁵ By contrast, payments under commercial health insurance or government programs (for example Medicare and Medicaid) are limited by negotiated contract or by law. Second, providers have an incentive to provide many services – and expensive services – to maximize the amounts charged and paid. Third, providers have an incentive in charge-based systems to unbundle services in their billing, that is to separate a given service or set of services into as many billed services as possible, again to maximize charges and payments.

Charge-based reimbursement also gives rise to line-item bill review. In this practice, insurers – usually through contracted bill-reviewers – review billed services to determine whether the services actually provided were reasonable and necessary to treat the admitted work injury and whether the billed services were properly coded and correctly reflect the services actually provided. This bill-review activity adds cost to the system and, as reported by CGI, leads to longer claim processing time and more litigation.

Survey results

Reimbursement rates – The DLI survey asked hospitals and ASCs to indicate the median payments they received from commercial and workers’ compensation insurers for services associated with several specific procedures. Most hospitals refused to answer the question. However, the Minnesota Hospital Association (MHA) provided aggregate data for five large hospitals and hospital systems combined; this data is shown in Table R-1.

MHA provided separate data for payments from large and small commercial insurers.¹⁶ For each medical procedure listed, hospitals received higher payments on average from workers’ compensation insurers than from commercial insurers. The average workers’

Table R-1
Average payments received by hospitals for facility services
associated with five common inpatient procedures, 2011 [1]

Procedure	Average payment from --			Workers' compensation as percentage of --	
	Large commercial insurers	Small commercial insurers	Workers' compensation insurers	Large commercial insurers	Small commercial insurers
Apply spine prosthetic device	\$40,797	\$52,326	\$50,901	125%	97%
Remove one spine lamina (lumbar)	\$24,744	\$32,866	\$35,218	142%	107%
Low back disk surgery	\$26,668	\$35,780	\$36,674	138%	102%
Lumbar spine fusion	\$48,062	\$61,279	\$61,577	128%	100%
Insert spine fixation device	\$25,298	\$25,130	\$30,674	121%	122%
Average [2]				135%	103%

1. Aggregate data supplied by Minnesota Hospital Association in response to question 14 of DLI Cost Reimbursement Survey. These numbers are for several hospitals combined.
2. Computed by DLI Research and Statistics as a weighted average of the percentages for the five procedures. The weights are the numbers of discharges associated with each procedure.

¹⁵CGI Report, *citing* Gerard F. Andersen, “From ‘Soak the Rich’ to ‘Soak the Poor’: Recent Trends in Hospital Pricing,” *Health Affairs* 26:3 (May/June 2007), p.783.

¹⁶For four of five commonly performed inpatient procedures the large commercial insurance payment was substantially smaller, on average, than the small commercial payment, presumably because of greater bargaining power on the part of large insurers.

compensation payment ranged from 121 to 142 percent of the average large commercial payment and from 97 to 122 percent of the average small commercial payment. For the five procedures combined, the workers' compensation payment averaged 135 percent of the average large commercial payment and 103 percent of the average small commercial payment.

With respect to ASCs, the average workers' compensation payment for the 10 most common procedures ranged from 62 to 197 percent of the average commercial insurance payment, with an overall average of 132 percent of the average commercial insurance payment.

These "premiums" over commercial insurance occurred even though hospitals and ASCs reported lower workers' compensation payments as a percentage of charges than the 85 and 100 percent rates prescribed by law.

For eight of the top 10 workers' compensation inpatient and outpatient procedures, insurers reported workers' compensation payments to large hospitals for associated facility services ranged from 56 to 72 percent of charges, averaging 66 percent. The estimated charged amounts for the procedures for which the MHA provided payment data are set forth below.

Procedure	WC payment	Estimated WC charge	Large commercial insurer payment	Small commercial insurer payment
Apply spine prosthetic device	\$50,901	\$77,123	\$40,797	\$52,326
Remove one spine lamina (lumbar)	35,218	53,360	24,744	32,866
Low back disk surgery	36,674	55,566	26,668	35,780
Lumbar spine fusion	61,577	93,298	48,062	61,279
Insert spine fixation device	30,674	46,476	25,298	25,130

Because the specific payment amounts from commercial health insurers are typically specified in the contracts between them and medical providers, the "charged" amount of a service or procedure has little relevance in that context. The charged amount is critical in the workers' compensation non-fee-scheduled system, however, because payments are based on a percentage of the charge. The likely reason actual payments to hospitals are less than 85 to 100 percent is because insurers deny payment on some line-item charges through their bill-review process, because the charged rate may be higher than the prevailing charge and because some services are denied as unnecessary or unrelated to the injury.

For ASC facility services for the 10 most common workers' compensation procedures, reimbursement was also less than the statutorily prescribed percentages. They averaged 76 percent and ranged from 70 to 82 percent of charges.

Implant mark-ups – In its study, CGI found Minnesota was one of only two of the studied states that place *no limits* on the mark-ups hospitals and ASCs may charge for implants. Implanted medical devices can be anything from orthopedic support rods and screws to artificial intervertebral discs or medication pumps. The hospital or ASC where the surgery is performed typically purchases the implant from the manufacturer or a supplier, which delivers the implant to the hospital, sometimes at the precise time of surgery. The hospital or ASC usually bills for the implant by adding a substantial mark-up to its cost for the device.

While the majority of hospitals surveyed refused to provide information regarding the amount of mark-ups for implants, the five that did disclosed mark-ups of up to 200 percent. Information provided to DLI by insurers revealed even higher mark-ups – up to 500 percent in at least one case. In that case, a Minnesota hospital billed the insurer \$9,932 for an implant that

cost \$1,653, effectively charging the workers' compensation system *six times* the hospital's actual cost.

Only eight of the ASCs responded to this question; respondents indicated a 55 percent median mark-up for implanted surgical devices.

PAYMENT MECHANICS

Background

The workers' compensation medical payment system is regulated by statute and rule. Providers and payers are required to follow specific rules regarding the form, content and submission of bills and remittance advice, and the timing of payment.

In 2007, the Minnesota Legislature enacted Minnesota Statutes section 62J.536 mandating all health care services billing and remittance advice transactions in Minnesota, including those for workers' compensation, be in an electronic format. The required electronic billing and remittance transactions (collectively referred to as "e-billing") were required to be implemented according to a phased-in schedule to make the transition from paper billings and remittance advices as easy as possible. Specific deadlines were established by which: health care bills were to be submitted to the payers electronically (the standard electronic format medical bill is known as the ANSI X12 837 or "837"); health care payment and remittance advice transactions (the electronic remittance advice is known as the ANSI X12 835 or "835") were to be submitted to the providers electronically; and payers were required to return an electronic acknowledgment to the provider confirming the provider's 837 had been received (the most commonly used electronic claim acknowledgement transaction is known as the 277CA or "277").

These e-billing reforms were meant to make the billing and payment process more time-efficient and cost-effective for both providers and payers. However, payers and providers have been slow to implement the e-billing requirements for workers' compensation claims. Providers say there are several reasons for the delay. They state workers' compensation medical transactions present unique challenges not present in standard health insurance billing transactions, most notably the requirement for a medical record "attachment" (medical documentation of the nature of the charge and its relationship to the work injury) to accompany the actual billing. Also, the system of passing electronic transactions back and forth between providers and payers relies on complex relationships between myriad "clearinghouses," billing agents and bill reviewers, resulting in frequent difficulties in establishing functional connectivity.

While there have been difficulties in implementing e-billing in the workers' compensation system, Minnesota is just one of a handful of states to require e-billing for payment of workers' compensation medical bills. DLI is aware of only two other states – California and Texas – that have implemented e-billing for payment of workers'-compensation-related medical bills, and those states are no further along than Minnesota. That e-billing has not been widely mandated in state workers' compensation systems may be further evidence that there are significant challenges with its implementation not present in commercial health insurance systems.

Survey results

Electronic billing – Hospitals responding to the survey reported, on average, only 5 percent of their bills were transmitted electronically via 837s during 2012. ASCs reported 6

percent of their bills were transmitted electronically during that period. Insurers reported a somewhat higher (but still relatively small) percentage of medical bills transmitted to them electronically via 837s: hospital bills led the way at 33 percent received by electronic data interchange, while just 22 percent of nonhospital medical bills were received electronically during 2012.

Insurers reported they returned an electronic remittance advice via 835 an average of 97 percent of the time. Hospitals, meanwhile, reported receiving *no* remittance advices via 835 in response to the electronic billings they sent in 2012.

DLI is unable to reconcile the obvious disparity between the insurers' belief they are responding with an electronic remittance advice for *every* electronic billing and the hospitals' assertion they are not getting *any* electronic remittance advices.

DLI and the Minnesota Department of Health (MDH) have been working with payers and providers to achieve improved compliance with the e-billing requirements. In 2012 and 2013, DLI and MDH issued several corrective action plans designed to improve compliance with the e-billing requirements. Since that effort began, several large health care providers have reported improved compliance in terms of the numbers of electronic billing transactions being transmitted to workers' compensation payers. In addition, DLI has been advised some clearinghouses have begun offering their health care provider clients products that make transmission of the electronic attachment more convenient. To speed-up the process of connectivity among clearinghouses, MDH, in collaboration with DLI, issued an advisory outlining compliance requirements specifically aimed at clearinghouses, in September 2013.¹⁷

Related to electronic billing is electronic payment, or electronic funds transfer (EFT). Providers have advised DLI that EFT is common in the commercial health insurance industry and it creates a number of efficiencies. However, EFT is not mandated in workers' compensation transactions and survey results indicate very few workers' compensation payers use this method of payment. Hospitals and ASCs reported a 1 and 2 percent EFT payment rate, respectively. Insurers reported they pay 4 percent of their workers' compensation medical bills via EFT.

Further inquiry is needed to determine why insurers are not using EFT for payment of workers'-compensation-related medical bills.

Processing costs – As noted, a charge-based reimbursement system can be expected to add to the cost of the billing and payment system, both through increased complexity in billing and payment processes and through higher denial and dispute rates. Consequently, the costs of both providers and insurers for billing, collecting and paying workers' compensation claims were explored in the survey.

Insurers reported the total cost of operating their workers' compensation medical payment system was equal to an average of 7 percent of the total medical payments made for 2011. Of those costs, only 9 percent, on average, were dispute-driven. Most of the cost of

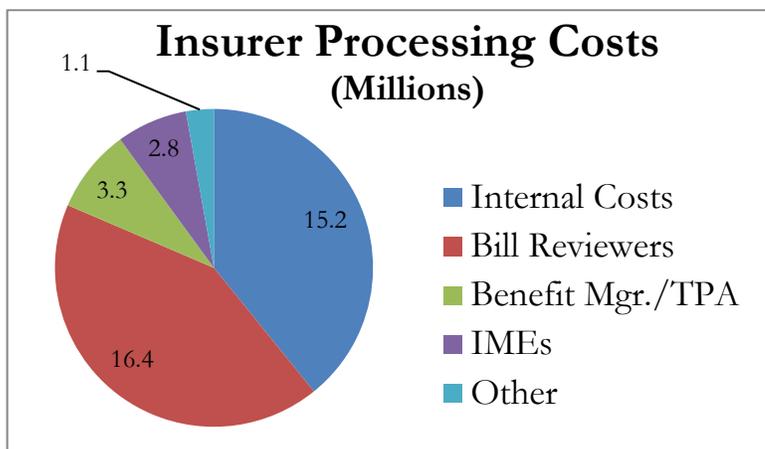
¹⁷Available at www.health.state.mn.us/asa/updt7.pdf.

running the medical payment system (61 percent) was for outside vendor services, broken down as follows:

Bill reviewers ¹⁸	70 percent
Benefit managers and TPAs	14 percent
Independent medical examiners	12 percent
Other	5 percent

These figures reveal insurers spent almost 43 percent of their workers' compensation medical payment system costs on bill reviewers. Based on this figure, the estimated workers' compensation systemwide cost of bill reviewers totaled \$16.4 million. As is evident, bill review is a costly, and line-item bill review is a direct consequence of Minnesota's charge-based reimbursement system.

Hospitals reported the overall cost of their billing and collections system for workers' compensation inpatient treatment was an average of 6 percent of total payments received. Of those costs, an average of 70 percent (or 4.2 percent of total payments) was related to costs incurred in resolving disputes that



arose with the insurer or other payer over payment of the bill. Hospitals also reported their cost of transmitting the bills to the payer averaged 1 percent of total inpatient treatment payments.¹⁹ Some of the hospitals commented that workers' compensation billing and collection costs are much higher than for commercial health insurance claims. Several commented that the transmission cost *per se* is not a problem, rather it is the subsequent need for communication back and forth that adds major cost and delay in payment.

ASCs reported lower billing and collection costs overall, averaging just 2 percent of payments received. Only one of the five responding ASCs reported any dispute-related costs as a component of their billing and collection costs, and that was only 1 percent of its total processing costs. ASCs, like hospitals, reported their cost of transmitting the bills to the payer averaged 1 percent of total payments for workers' compensation services.

Payment turnaround for nondisputed claims – Minnesota law requires insurers to pay, deny or request additional information needed to determine compensability within 30 calendar-days after a bill is received.²⁰ Insurers were asked to report their turnaround time separately for nondisputed hospital inpatient payments and for all nondisputed medical payments *other than* hospital inpatient bills. This includes payments to hospitals for outpatient services, doctors, clinics and all other types of medical services. Insurers reported they paid 95 percent of such claims within 30 days. They further reported that only 1 percent took longer

¹⁸Some insurers included clearinghouse costs in this category.

¹⁹This figure represents the expenses hospitals pay to clearinghouses and other vendors, as well as costs of faxing, mailing or other costs incurred in transmitting the bill to the payer.

²⁰If the provider did not submit medical records or reports to substantiate the nature of the charge and its relationship to the work injury, the insurer must request the records or reports within the 30-day period and must pay or deny the charges within 30 days after the documentation is received. For inpatient services, hospitals are required to submit medical records or reports only upon an insurer's request. Minnesota Rules Part 5221.0700, subp. 2.

than 90 days. Insurers reported 88 percent were paid within 30 days and 98 percent were paid by the 60-day mark.

Hospitals presented a very different perspective on turnaround time for payment of inpatient medical bills. They reported that on average, only 14 percent of nondisputed inpatient billings were paid within 30 days of billing. They further indicated 43 percent were paid within 60 days and 35 percent took longer than 90 days. ASCs reported somewhat faster processing times, indicating they received payment for 20 percent of their nondisputed bills within 30 days and 75 percent within the 60-day mark. Only 5 percent of ASC payments for nondisputed bills took longer than 90 days.

It is difficult to reconcile the disparity between these very different perspectives. Insurers report payments are made promptly, while hospitals and ASCs report payment turnaround times well in excess of the 30-day statutory standard.

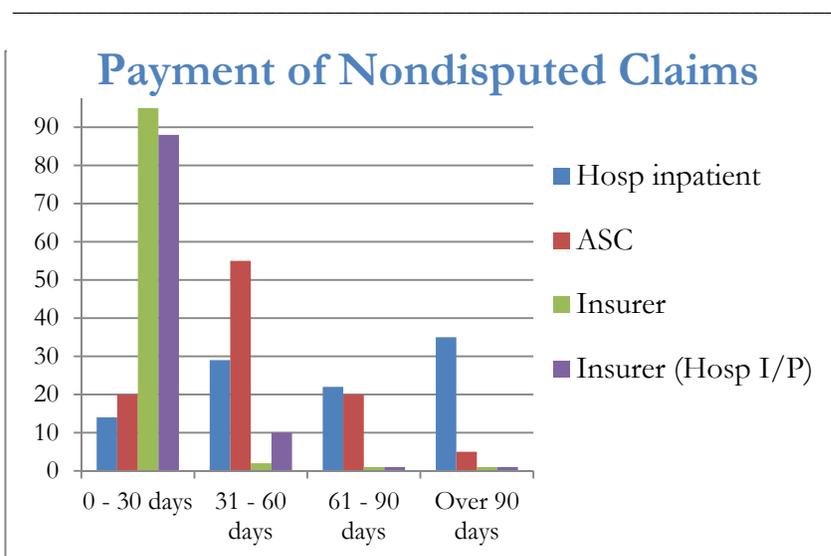
One possible explanation is hospitals anecdotally complain insurers repeatedly ask for additional information, which delays their receipt of payment. If that is true, insurers could be calculating the 30 days from the date they receive all requested information, whereas hospitals are calculating it from the date the bill was submitted.

Prior authorization –

Prior *approval* of medical procedures or treatment is only required in limited circumstances related to extended, passive treatment.²¹

Minnesota’s workers’ compensation law instead requires prior *notification* for surgery and certain other medical procedures.²² Under the prior-notification rule, medical providers are required to provide notice of a particular procedure or treatment to the payer at least seven working-days in advance. The payer must, within seven working-days, approve or deny authorization, request additional information, or request a second opinion or an independent medical examination; if it does not object within seven working-days of receiving the notification, the procedure or treatment is deemed approved.

Even though in most cases they only need provide prior notice, hospitals indicate they requested prior authorization for 90 percent of their inpatient procedures. They reported such requests were approved and paid without dispute 71 percent of the time. In 19 percent of the cases, the insurer denied the treatment and the injured worker did not dispute the denial. In 10 percent of prior-authorization requests, the insurer denied the treatment and the employee disputed the denial.



²¹See, e.g. Minnesota Rules Part 5221.6200, subp. 3.

²²See Minnesota Rules Part 5221.6050, subp. 9.

ASCs made a similarly high percentage of prior-authorization requests for their surgical procedures, at 86 percent of procedures performed. Of those requests, 91 percent were approved by the insurer, 9 percent were denied without the employee disputing the denial and only 1 percent was denied by the insurer with the employee disputing the denial.

Insurers responded to this question on the basis of all medical services billed to them (not just surgeries) and reported they received prior-authorization requests for 14 percent of all medical services. They reported a similar approval rate of 91 percent for all prior-authorization requests. In 5 percent of cases, the service was denied and the employee accepted the denial. In 3 percent of cases, the employee contested the denial of the medical services.

While hospitals and ASCs are allowed to proceed with treatment if they receive no response from the insurer or even if authorization is denied,²³ it appears hospitals and ASCs are not doing so, probably because they do not want to risk not getting paid after they have provided the treatment. This creates delay and cost. More importantly, treatment for the injured worker is delayed or may not be provided at all.

DISPUTE COSTS

Background

State law requires employers to pay the costs of reasonable and necessary medical treatment to cure or relieve injured workers from the effects of work-related injuries and illnesses. However, employers and their insurers are not required to pay for unnecessary or excessive treatment or excessive charges for medical services. Disputes about what treatment is necessary or whether charges are excessive inevitably arise among the parties. During 2012, injured workers filed 5,070 claim petitions, many of which involved medical issues, and injured workers and providers filed 2,740 medical requests for assistance.²⁴

Disputes involving medical treatment reimbursement take many different forms. Sometimes the employer and insurer deny the compensability of the injury itself.²⁵ At other times the insurer denies the entire medical service on the basis of causation²⁶ or on the basis of medical necessity. The dispute may also arise out of the insurer's reduction of the billed amount, sometimes known as re-pricing. Payers can discount a provider's bill in accordance with the fee schedule or other workers' compensation payment rules. Disputes may also arise when the provider believes the payer has misapplied a payment rule.

Health care providers can resolve reimbursement disputes in one of three ways. Most disputes are resolved by the parties simply communicating with one another without resorting to litigation. The second approach is for the provider to "tag along" by joining litigation that has already been commenced by another party (usually the injured worker). This process is known as intervention; a provider will often intervene in existing litigation when the issues in dispute are also dispositive of the health care provider's claims, such as in a dispute about primary liability.

²³When an insurer denies authorization, the provider may proceed with the treatment subject to a later determination of compensability from the commissioner or a compensation judge, with a limited exception for nonemergency surgery in certain cases. *See* Minnesota Rules Part 5221.6050, subp.9.

²⁴*Minnesota Workers' Compensation Systems Report, 2011.*

²⁵This is referred to as a denial of primary liability.

²⁶This describes a situation where there is an admitted injury, but the insurer is taking the position that the treatment at issue is for a condition not related to the admitted injury and, therefore, is not reimbursable.

The third approach is for the provider to initiate litigation directly when payment for a medical service is reduced or denied by the insurer on the basis the treatment was not reasonable and necessary or the charge was excessive.

Dispute rate

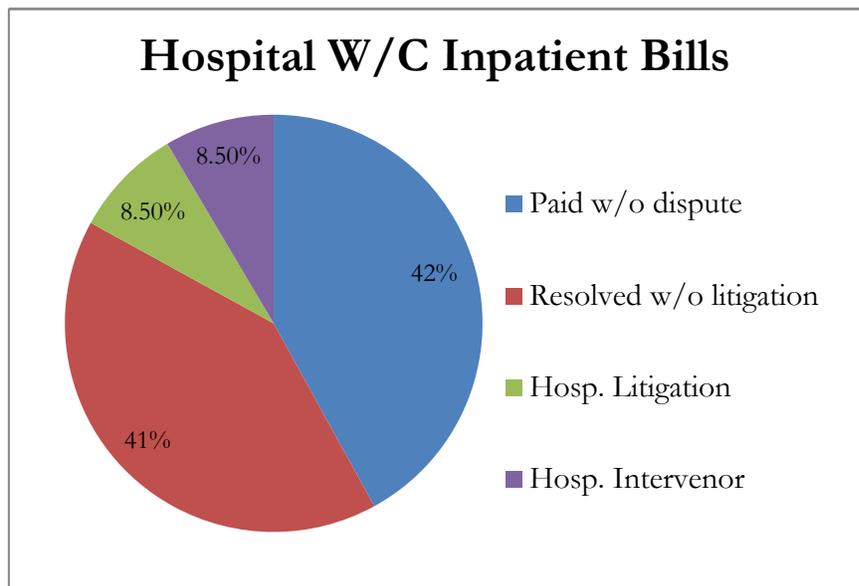
To fully evaluate the friction costs arising out of disputes within the workers' compensation medical payment system, DLI defined disputes broadly²⁷ when it asked providers and payers about their dispute rate. While the survey results point to a relatively low overall dispute rate in connection with medical billing transactions, because there are hundreds of thousands of billing transactions, there are many thousands of disputes.

Insurers reported health care providers disputed the insurer's nonpayment or the amount of payment of 9 percent of medical bills. Of those disputes, insurers reported 4 percent involved ASC facility services, 9 percent involved hospital inpatient services, 28 percent involved hospital outpatient services and the remaining 58 percent involved all other medical services.

Hospitals have a relatively high rate of disputes with respect to their inpatient bills. They reported that, on average, 35 percent of the injured workers they treated as inpatients during 2011 had bills that were litigated at DLI or the Office of Administrative Hearings (OAH). Some of those disputes may have involved the provider and some may have involved only the employee and the insurer.

Hospitals also reported that 58 percent of their inpatient billings in 2011 involved a dispute about the amount of payment. Most of those disputes were resolved without litigation at DLI or OAH.

The accompanying chart shows the average percentages of hospital inpatient bills by dispute status. Among all inpatient bills, 41 percent (or 71 percent of disputed bills) were resolved without resort to litigation at DLI or OAH; these disputes were resolved by a phone conversation, by providing additional information or by similar action. Hospitals initiated litigation to resolve a payment issue with respect to only 8.5 percent of inpatient bills (15 percent of disputed bills) and they participated as intervenors in litigation initiated by other parties (usually the injured worker) with respect to the remaining 8.5 percent of inpatient bills.



²⁷The survey defined dispute as “any disagreement about a charge or payment that prompted additional communication or action, including a phone call, a letter, sending additional information or initiating a legal proceeding.”

ASCs reported a lower dispute-rate; an average of only 3 percent of their patients during 2011 had bills that were involved in litigation. ASCs disputed nonpayment or the amount of payment on 8 percent of their bills in 2011.

Hospital inpatient services are among the most costly medical procedures, so insurers and their bill reviewers undoubtedly look at these charges closely. It follows that the higher dispute-rate for inpatient services at hospitals may result from insurers (and their bill reviewers) re-pricing hospital inpatient facility charges more aggressively. Insurers reported paying an overall weighted average of only 66 percent of billed facility charges for 10 hospital inpatient procedures listed in the survey, while ASCs were paid an average of 75 percent of their billed facility charges for a similar set of procedures. Regardless of the reason, the fact that the bills of more than a third of all hospital inpatients were litigated is concerning.

Payment rate for disputed claims

Providers can initiate litigation directly against insurers to collect their bills when the dispute centers on the *excessiveness* of the treatment or the billed charge.²⁸ Providers may *not* initiate litigation if the insurer has denied primary liability for the injury or has denied there is a causal link between the injury and the billed treatment. Only the injured worker has standing to challenge a denial of liability or a causation defense that has been asserted by the insurer.

Examples of an excessiveness dispute that can be litigated directly by a provider are where an insurer (or its bill reviewer) has reduced the payment for a service below what the workers' compensation fee payment rules²⁹ allow or where an insurer has denied payment for a service because it exceeded the level, duration or frequency allowed by the workers' compensation treatment parameters.³⁰ Hospitals reported an 82 percent recovery rate when they contested a bill reduction by initiating litigation of their own.

Where an insurer denies a bill on the basis there is no causal connection between the injury and the treatment, the provider cannot initiate litigation on its own, but *is* entitled to submit the bill to the injured worker or his or her health insurance carrier. Hospitals reported that in cases where the workers' compensation insurer denied payment for medical services, they submitted bills to the patient or a third-party payer (usually the employee's health insurer) 36 percent of the time. When bills are submitted to a third-party payer, they are typically paid at a lesser rate than the workers' compensation fee schedule would allow. In that circumstance, a provider is entitled to assert a claim for its *Spaeth* balance³¹ as an intervenor, if the employee has initiated litigation.

If an employee challenges the insurer's denial of liability, a provider can also intervene for payment of its entire bill if there has been no payment by the employee's health insurer. Hospitals' reported recovery rate when intervening in pending litigation was somewhat lower than their recovery rate in direct litigation, but is still substantial. Hospitals, on average, reported a 42 percent recovery rate when they intervened in a proceeding where their entire bill was at

²⁸Providers are prohibited from billing or collecting from the injured worker or any other payer when the insurer denies or reduces payment based on an excessive charge or on the basis that the service was unreasonable or unnecessary.

²⁹The payment rules can be found in Minnesota Rules Parts 5221.0500 to 5221.4070.

³⁰The treatment parameters are in Minnesota Rules Parts 5221.6050 to 5221.8900.

³¹"*Spaeth* balance" refers to the right of a provider to claim the difference between what it has received from a health insurer (because the workers' compensation insurer denied liability) and what it should have received under the workers' compensation fee schedule for a medical service. This right was established by the case of *Spaeth v. Cold Spring Granite Co.*, 56 W.C.D. 136 (W.C.C.A. 1996) *aff'd in part, rev'd in part* 560 N.W.2d 92 (Minn. 1997).

issue, compared to a 74 percent recovery rate when they were intervening only for their *Spaeth* balance. The higher recovery in the latter situation is likely explained on the basis the provider had already received a substantial portion of its billing from the health insurer in the *Spaeth* situation.

Whether the *Spaeth* decision should be repealed was a topic of much debate during the 2013 legislative session. Supporters of the repeal argued that because providers were being compensated for their services by a commercial health insurer, they should not be entitled to additional payment from the workers' compensation payer. Supporters urged repeal of *Spaeth* as a step toward controlling medical costs.

Repeal opponents argued that additional administrative work is necessary with workers' compensation cases. Therefore, they say, additional compensation is warranted. Providers pointed out they must contact, obtain and share information with the employer and workers' compensation carrier, complete workability forms and respond to requests for updates. Providers also asserted workers' compensation carriers do not provide for electronic claims handling,³² do not pay claims promptly and often make multiple requests for the same information. They also argued the repeal of *Spaeth* would adversely impact injured workers who would be required to pay copays and deductibles if a provider were restricted to collecting payment only from a commercial health insurer.

In the end, the proposal to repeal *Spaeth* was withdrawn.

Dispute costs

Dispute costs figure much more prominently for hospitals' inpatient billings than for ASCs. Hospitals, on average, reported 70 percent of their workers' compensation billing and collection costs for inpatient services were dispute-driven, while ASCs reported no dispute costs. Hospitals also reported, on average, their billing and collection cost for workers' compensation inpatient bills amounted to 6 percent of payment received. Consequently, dispute-related costs amounted to about 4.2 percent of payments for inpatient facility services.

Insurers responded that, on average, only 9 percent of their workers' compensation medical payment system costs were dispute-driven (although responses ranged from 0 to 76 percent). Putting this average in context, insurers also reported their total cost of running their workers' compensation medical payment system amounted to an average of 7 percent of total workers' compensation medical payments made. These answers suggest insurers' dispute-related costs amounted to less than 1 percent of payments made for all workers' compensation medical services.

The chart below shows the relative cost levels for the entities surveyed. Information provided by hospitals, ASCs, insurers and self-insurers was extrapolated to provide a systemwide cost estimate. The combined dispute-costs for the entities surveyed are an estimated \$5 million annually. The chart also reflects that more than a third of hospital processing costs³³ are related to disputed claims.

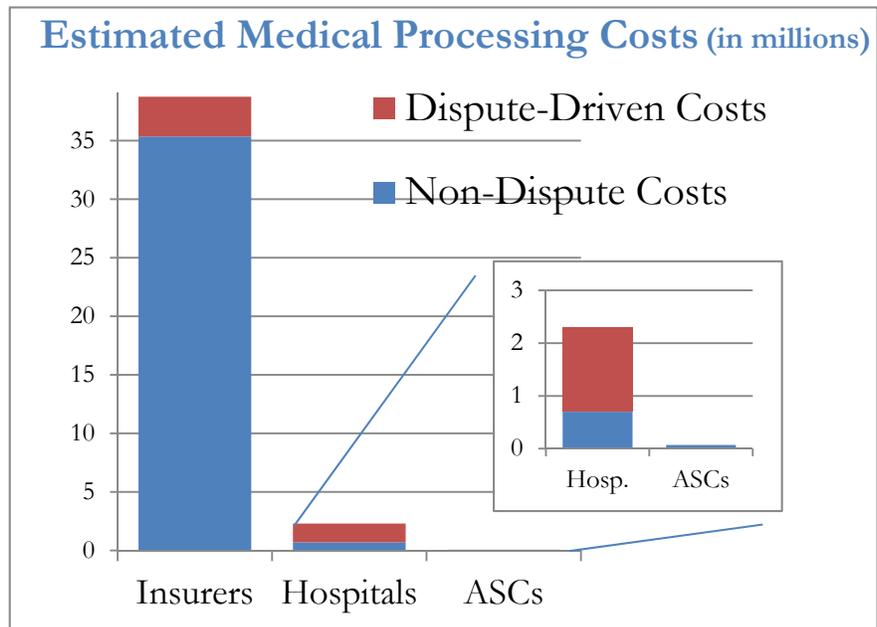
ASCs reported their dispute-driven costs, and their costs of billing and collecting for workers' compensation medical services, were relatively small.

³²As noted elsewhere in this report, the obstacles to e-billing appear to exist for both providers and payers.

³³Processing costs are those costs related to transmitting workers' compensation bills to the payer.

Insurers were asked to provide information breaking down the components of their total medical payment system costs (which includes dispute costs). The two largest vendor cost components were bill reviewers, at 70 percent of total medical payment system vendor cost, and independent medical examinations (IMEs), at 12 percent.

Insurers reported they obtained IMEs for 4 percent of their total compensable claims in 2011. The average cost for an IME was \$2,124. The total annual cost for IMEs is estimated at \$8 million. Although IMEs often set the stage for disputes about medical treatment expense, they also set the stage for disputes about indemnity costs. It is, therefore, difficult to attribute all of the cost of IMEs to insurers' medical cost dispute expense. And, in any event, IMEs do not appear to represent a significant cost component.



Processing time

Not surprisingly, hospitals reported it took significantly longer to receive payment for disputed medical bills than nondisputed bills. In nondisputed cases, an average of 35 percent of billings were still outstanding after 90 days. In contrast, where bills were the subject of a dispute, an average of 68 percent were not paid at the 90-day mark. A number of providers volunteered that even at 180 days, anywhere from 40 to 55 percent of disputed billings remained unpaid. This was especially true in cases where the provider was trying to collect the bill as an intervenor; comments indicated that intervenor cases often take six months to a year to resolve. One hospital even commented that an estimated 25 percent of its disputed charges remained unpaid after a year.

When asked for the percentage of disputed bills that were paid within 30 days of initial billing, insurers and self-insurers responded that 50 percent or more of all disputed medical bills were paid within that period. They also reported 33 to 35 percent of all disputed medical bills remained unpaid at the 90-day mark. Department researchers question the credibility of these figures because it does not seem reasonable that more than half of disputed claims were paid within 30 days. It is suspected some respondents were counting from a later point, such as when a dispute was resolved. For this reason, these figures should be viewed with caution.

POSSIBLE REFORMS AND BARRIERS

1. Repeal *Spaeth*

During the 2013 legislative session, a proposal was made to legislatively repeal the *Spaeth* decision as a means of controlling workers' compensation medical costs. As discussed above, the *Spaeth* decision gives health care providers the right, after being paid by an injured worker's health insurance company, to later obtain any additional amounts payable from the workers' compensation insurer if the injury is ultimately determined to be work-related.

The proposed repeal would have required health care providers to make a choice: seek prompt reimbursement from the employee's health insurance carrier; or forego immediate payment and pursue reimbursement from the employee's workers' compensation insurer.

Hospitals and other medical providers objected to the proposed repeal. They said treating injured workers is more time consuming and costly than treating other individuals because of extra monitoring and reporting requirements and delays and disputes regarding payment. Thus, they state, they should receive additional compensation for treating work-related injuries.

Others asserted the repeal of *Spaeth* would encourage insurers to deny medical treatment claims more often, leading to increased dispute-costs overall and corresponding delays in treatment of injured workers. If providers had to accept payment under a health plan as payment in full, it was asserted workers' compensation insurers would be incentivized to deny medical treatment bills in the hope the injured worker would get the treatment paid under existing health coverage. Then, even if workers' compensation liability was clearly established later on, the maximum exposure for the service would be the discounted rate paid by the health insurer. DLI and OAH would need to be diligent in imposing penalties against insurers that unreasonably deny liability for this reason.

Providers also claimed, as noted previously, that injured workers would be harmed if *Spaeth* were repealed because most employer-sponsored health insurance programs require employees to make copayments and pay deductibles. The amount of copays and deductibles varies from one health insurance carrier to another and also varies among plans offered by a single payer. Thus, it is not possible to estimate the precise impact on injured workers. Suffice it to say that if *Spaeth* were repealed, employees would potentially be liable for paying at least part of the cost of treating their work-related injuries.

One solution to concerns raised regarding copays and deductibles is to require workers' compensation payers to reimburse employees for those amounts if an injury is ultimately determined to be work-related. In that manner, an employee required to pay copays or deductibles would ultimately be made whole. However, disputed workers' compensation claims can take a year or more to resolve. Requiring an injured employee to assume those payments while the claim is pending would likely put additional financial pressure on the employee.

Another alternative is to prohibit the provider from collecting copays and deductibles unless the workers' compensation insurer is ultimately determined not to be liable for the injury. Medical providers would likely object to such a proposal.

2. Limit implant mark-ups

As noted, Minnesota is one of only two states studied by CGI that place no limits on the mark-ups hospitals and ASCs charge for implants. States that limit the amount of mark-ups typically cap the amount that will be reimbursed above the invoiced charge. Permitted mark-ups generally range from 5 to 65 percent above the invoiced price, with 20 percent representing the most common limitation.³⁴

There is no apparent justification for allowing hospitals and ASCs to charge the workers' compensation system grossly inflated prices for implants. If the reimbursement rate of implants is not otherwise addressed through the implementation of a diagnosis-related-group-based system or other means, specifically capping the mark-up would be a reasonable cost-containment measure. The only foreseeable barrier to such an initiative would be objections from hospitals, ASCs and, possibly, implant manufacturers.

3. Change Minnesota's reimbursement system

Use DRGs and APCs for reimbursement – As noted, DLI retained CGI in 2011 to evaluate certain aspects of Minnesota's workers' compensation medical payment system. CGI analyzed the medical reimbursement methods used by workers' compensation systems in 15 states.³⁵ The states were chosen based on geographic location, workers' compensation health care expenditure trends and various reimbursement methodologies.³⁶

The specific reimbursement methods used by the workers' compensation systems in the studied states include the following.

- **Prospective payment systems** – In prospective payment systems, a hospital or ASC is reimbursed for facility services according to a specific category of care. For *hospital inpatient services* this category is called a diagnosis-related group (DRG) and is based on the patient's diagnosis, procedures performed, patient demographics and medical severity. For *hospital outpatient and ASC services* the category is called an ambulatory payment classification (APC) and is based on the procedures performed. These groups are based on the likelihood that patients in the same DRG or APC will need approximately the same level of care and services for their condition. Medicare and most commercial group health insurers use a DRG system in determining hospital payment rates.
- **Percent of charge (POC) reimbursement** – Percent-of-charge-based systems are those for which payment represents either a discount from or percentage reduction of a charge. Minnesota's payment of 85 percent of a hospital's usual and customary charges is an example of a POC-based system.

³⁴This limit is imposed by Colorado, Louisiana, Maine and Nevada.

³⁵See *Report on Workers' Compensation Reimbursement Methodologies*, CGI Federal Inc. (2011), available at www.dli.mn.gov/WC/Pdf/cgi_federal_report2012.pdf. CGI also analyzed the medical reimbursement systems used by Medicaid and Medicare; for purposes of this report, specific data from only the state systems is included. More complete information regarding the regulation of hospital inpatient charges in other states' Medicaid and workers' compensation systems is contained in Appendix E.

³⁶The states studied were: California, Florida, Illinois, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Nebraska, North Carolina, North Dakota, Tennessee, Washington, Wisconsin and Wyoming.

- **Fee schedules** – As generally used in Minnesota for reimbursement of noninpatient medical services, fee schedules establish a maximum reimbursement rate for each specific type of service (generally professional and diagnostic services).
- **Per diem** – This reimbursement method for inpatient hospital services is based on a specified daily rate.

CGI found that 60 percent of the studied states use a per-diem- or DRG-based system for inpatient hospital costs covered by workers' compensation. Thirty-three percent of the states reimburse inpatient costs based on either a percentage of the cost or a percentage of the charge for the service. Of those, only three states, such as Minnesota, provide for reimbursement of inpatient services based on whatever amount the provider charges.³⁷

Regarding hospital-based outpatient surgery, CGI determined: four of the 15 states use APCs for workers' compensation; four use a percentage of charges; and three use a fee schedule. As noted above, certain medical services provided on an outpatient basis in Minnesota are covered by the fee schedule while certain others are paid based on the provider's usual and customary charge.

For nonhospital-based ASCs, six of the study states (40 percent) use some form of Medicare-based reimbursement for workers' compensation services.

CGI noted that because Minnesota's workers' compensation system bases payment of most hospital and ASC services on the amount charged, it has no ability to control the cost for those services. As a result, while medical costs represent the primary cost-driver in Minnesota's workers' compensation system, the state has no control over a significant portion of those costs.

CGI recommended Minnesota consider implementing a Medicare DRG-based system for reimbursement of all hospital inpatient services.³⁸ Similarly, it recommended adoption of the Medicare APC payment system for reimbursement of ASC services. According to CGI, these systems are widely used and understood in the health care marketplace. In addition, the systems could be customized to reflect the payment priorities, rates and other policies of Minnesota's workers' compensation system.

Effect and incentives of DRG/APC reimbursement systems – As noted, 60 percent of the states studied by CGI use a per-diem- or DRG-based system for payment of inpatient hospital care and 27 percent use a similar system for payment of outpatient services. And, since CGI issued its report, Indiana enacted laws to implement a DRG-based system for use in its workers' compensation system and a proposal has been introduced in Wisconsin to do the same.

Provider incentives are substantially different under a DRG- or APC-based system than under Minnesota's current charge-based reimbursement system. Under those systems, providers do not gain from charging higher amounts for services. In addition, given the decision to hospitalize a patient and/or perform certain procedures, the hospital or ASC has an incentive to provide only those facility services necessary for carrying out the given procedures and

³⁷Those states are Iowa, North Carolina and Wyoming; Massachusetts also uses a charge-based system, but regulates the amount of charges.

³⁸Appendix F provides several examples of the average charges of Minnesota hospitals for certain inpatient procedures and the average Medicare payments for those procedures.

rendering appropriate patient care. Further, a facility will not gain from unbundling facility services associated with specific procedures. This, in turn, reduces insurer costs for line-item bill review and the associated propensity for disputes about line-item charges.

A number of policy and implementation issues would have to be decided to implement a DRG- and APC-based system, including payment levels. Stakeholders, including medical providers and payers, will likely have strong and differing views about how such payment levels are established. However, regardless of how reimbursement levels are determined, the adoption of a DRG- and APC-based system would be a significant step forward in controlling a large segment of medical costs within Minnesota's workers' compensation system. Instead of medical providers determining the amounts they will be paid, a DRG- and APC-based system would provide an objective, prospective system that would establish uniform reimbursement amounts based on the specific treatment provided. Such a system would also reduce the need for bill reviewers.

4. Curtail late payment of medical bills

Failure to comply with the law governing payment of medical charges contributes to increased workers' compensation disputes and delays in treatment. There are a variety of statutes and rules that govern the submission and payment of bills, the payer's liability for treatment costs and penalties that can be assessed for delay in payment or unreasonable or frivolous denials. Changes to these laws could facilitate prompt payment and reduce disputes and treatment delays.

Current rules provide that a penalty is payable to the employee,³⁹ but often it is the health care provider who is harmed by the delay in payment. The rules could be amended to permit DLI to assess a penalty payable to the health care provider or the employee, depending on who was harmed. For example, if treatment was delayed, the penalty would be payable to the employee. If the employee received timely treatment, but the insurer did not timely pay the provider, the penalty could be paid to the provider.

The workers' compensation law requires insurers to pay interest when medical payments are not made when due.⁴⁰ However, providers anecdotally report that interest is not always paid and some providers may not even know that it is owed. Accordingly, the rules could be amended to provide that interest on late payment of medical benefits must be paid whether or not it is requested by the provider or ordered by the commissioner or a compensation judge. Additional penalties or additional interest at a higher rate could be imposed if interest is not paid when due.

Potential barriers to these reforms include opposition from the insurance industry. Also, additional resources may need to be obtained and allocated by DLI to investigate alleged violations and assess penalties.

5. Enforce laws requiring electronic filing of medical bills

DLI's joint investigation efforts with MDH during the past year have revealed that, while medical billing transactions between health care providers and commercial health insurers are

³⁹See, e.g., Minnesota Rules Part 5220.2760, subp.3.

⁴⁰See Minnesota Statutes section 176.221, subd. 7.

almost universally in compliance with e-billing requirements, workers' compensation billing and remittance transactions are largely *not* in compliance.

An option to hasten the adoption of electronic billing and remittance advice transactions would be to grant DLI concurrent enforcement authority with MDH of the requirements of Minnesota Statutes section 62J.536 with respect to workers'-compensation-related transactions. This would allow DLI to more aggressively work with providers and payers (and their respective clearinghouses) to bring them into compliance with existing e-billing requirements and to sort out the unique issues that exist in the workers' compensation system.

The only anticipated barrier to this initiative is the need for additional DLI resources to gain expertise in this area and enforce existing statutes.

6. Insurer administrative costs

Medical providers have asserted one way to reduce workers' compensation costs in Minnesota is to limit or reduce insurers' administrative costs. To better evaluate this assertion, DLI requested information from insurers with respect to their loss ratios and other workers'-compensation-related costs.

Insurers reported an average loss ratio of 66 percent for their 2012 Minnesota workers' compensation business. That means out of every premium dollar earned, insurers spent an average of 66 cents on workers' compensation medical, indemnity and rehabilitation benefits (incurred losses). The loss ratios reported by insurers varied dramatically, from a low of 12 percent to a high of 97 percent.

Insurers, on average, also reported they made *no profit* on their Minnesota workers' compensation business. After deduction of incurred losses, insurers reported the remainder of premiums earned was used to pay agent and broker commissions, loss adjustment expenses, underwriting expenses, and taxes, licenses and fees. In total, insurers reported spending 40 cents of every earned premium dollar on costs associated with administering their workers' compensation programs. The combined total of benefit costs and administrative expenses is greater than the total amount of earned premiums; insurers rely on interest income to pay benefits to workers with long-term claims.

It must be emphasized the data provided by insurers was for only one year of experience. As a result, it is difficult to draw any meaningful conclusions from this data. Whether insurers' administrative-related expenses are too high or whether legislative action is needed to address these costs is beyond the scope of this study. Nonetheless, the data reported by insurers raises legitimate concerns with respect to the minimal loss-ratios of some insurers and that an average of more than 40 percent of premiums was spent administering insurance programs for injured workers rather than on the injured workers themselves.

Appendix A

Current levels and trends in Minnesota’s workers’ compensation medical costs

This appendix summarizes information about the amount paid for workers’ compensation medical care in Minnesota and the rate of change of the costs, comparing costs with general medical care and with other states, with a focus on inpatient and outpatient hospital costs.

Minnesota workers’ compensation medical care in perspective

Minnesota’s workers’ compensation system paid \$524 million in medical care for injured workers in 2011.⁴¹ Statistics from the Minnesota Department of Health show \$37.7 billion was paid in health care spending in 2010.⁴² This places workers’ compensation at about 1 percent of Minnesota’s health care spending.

With the exception of emergency room encounters, workers’ compensation accounts for less than 1 percent of total charges and encounters for hospital services (see Table A-1). While the average charge for an emergency room encounter is less than the average charge for other payers, workers’ compensation charges for hospital outpatient (excluding emergency room) and inpatient encounters are significantly higher. Data is not available to determine whether payments are significantly different.

Table A-1. Workers’ compensation hospital use compared with other payers

Hospital provider type	Workers' compensation percentage of hospital totals		Charge per encounter		
	Charges	Encounters	Workers' compensation (WC)	Other payers	Ratio of WC to other payers
Emergency room	0.8%	1.2%	\$ 1,176	\$ 1,698	69%
Outpatient	0.6%	0.3%	\$ 4,694	\$ 2,603	180%
Inpatient	0.4%	0.3%	\$ 34,389	\$ 27,871	123%

Source: Minnesota Department of Health, 2013.

Workers’ compensation medical benefit statistical summary

Workers’ compensation medical costs are examined in the *Minnesota Workers’ Compensation System Report, 2012*.⁴³ Medical benefits constituted 34.9 percent of workers’ compensation system costs in 2011. Among employers with insurance through the voluntary market,⁴⁴ that works out to \$0.47 per \$100 of payroll. Among voluntary market insurers, medical

⁴¹Workers’ Compensation: Benefits, Coverage and Costs, 2011. National Academy of Social Insurance, 2013.

⁴²Minnesota Health Care Spending and Projections. Minnesota Department of Health, 2012.

⁴³Minnesota Workers’ Compensation System Report, 2011. Minnesota Department of Labor and Industry, 2013.

⁴⁴Insurers in the voluntary market may choose whether to insure a particular employer. This is in contrast to the Assigned Risk Plan, which is required to provide coverage to employers that are unable to obtain insurance in the voluntary market.

benefits were estimated at 55.6 percent of total benefits for injuries and illnesses in 2011, an increase from 51.4 percent in 2001.

For all workers' compensation claims in 2010, developed workers' compensation medical benefit payments were \$6,290.⁴⁵ Among indemnity claims, average developed medical benefit payments were \$23,800. Adjusting for wage growth, average medical benefit payments per insured claim were 31 percent higher in 2010 related to 2003, while indemnity benefits were down 1 percent.

The Workers Compensation Research Institute (WCRI), an independent workers' compensation research organization located in Cambridge, Mass., publishes two series of annual reports, *CompScope* and *CompScope Medical Benchmarks*, examining various aspects of workers' compensation benefits for 16 participating states.⁴⁶ WCRI uses a claims and medical payment database from workers' compensation insurers that represent a majority of Minnesota's workers' compensation claims.⁴⁷ WCRI reports identify inpatient and outpatient care, and report on surgery cases, but do not separate out ASC services, which are included with other nonhospital providers.

Table A-2 presents the most recent set of broad measures of medical benefit costs from the *CompScope* series. Two sets of measures are provided: claims at an average of 12 months after the injury; and at an average of 36 months after the injury. WCRI found Minnesota's medical benefits paid per claim, measured at an average of three years after the date of injury, grew at an average annual rate of 9 percent for 2009 claims, compared with 2006 claims. Injured workers with a permanent partial disability benefit or lump-sum settlement payment received the highest average medical benefit payments, at an average of nearly \$26,000 for 2009 claims measured at three years.

CompScope Medical Benchmarks for Minnesota, 13th edition focuses on claims measured in 2011. To improve the comparability of the statistics between states, claims must have more than seven days away from work and values are adjusted for industry and injury mix. Thus, the values reported in Table A-3 are not the actual averages paid within Minnesota, but they provide an estimate close to the unadjusted values. For Minnesota, 17 percent of the claims had more than seven days of lost time measured at both 12 and 36 months. As shown in Table A-3, Minnesota's average medical payment for claims with more than seven days of lost time were slightly below the 16-state median for claims measured at 12 and 36 months after the injury.

⁴⁵Medical costs are developed by applying historical development factors to tabulated numbers to estimate their value at a future date. This figure is developed to an average maturity of 8.5 years from the date of injury. The value is then adjusted for average wage growth to 2011 wage levels.

⁴⁶The other 15 states are: Arkansas, California, Florida, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Michigan, New Jersey, North Carolina, Pennsylvania, Texas, Virginia and Wisconsin.

⁴⁷The *CompScope Benchmarks 14th edition* database contains 56 percent of Minnesota's 2011 claims. The *CompScope Medical Benchmarks 13th edition* database for services by provider type includes 38 percent of the indemnity claims and the database for detailed hospital services includes 25 percent of indemnity claims.

Table A-2. WCRI CompScope medical benefit values for Minnesota claims

	Claims at 12 months' average maturity		Claims at 36 months' average maturity	
	Mean benefits paid on 2011 claims	average pctg change 2006 to 2011 claims	Mean benefits paid on 2009 claims	average pctg change 2006 to 2009
All paid claims [1]	\$ 2,713	6.1%	\$ 3,661	9.2%
Claims with more than 7 days lost time	\$10,560	4.6%	\$15,363	9.0%
TTD claims with more than 7 days lost time[2]	\$ 9,638	4.8%	\$ 8,671	9.2%
PPD/lump-sum claims with more than 7 days lost time[3]	\$16,337	4.3%	\$25,772	6.3%

1. Includes medical only and indemnity claims.
2. Claims with temporary total benefits paid but no PPD or lump-sum payments.
3. Claims with PPD and/or lump sum payments.

Source: CompScope Benchmarks for Minnesota, 14th Edition. Workers Compensation Research Institute, 2013.

Table A-3. Comparison of Minnesota medical payments with CompScope median state values

Claims with more than 7 days lost time, adjusted for industry and injury mix	Minnesota	16-state median	MN value compared to median
Average medical payment			
2010 claims at 12 months average post-injury	\$11,089	\$11,628	-4.6%
2008 claims at 36 months average post-injury	\$14,090	\$14,999	-6.1%
2010 claims at 12 months average post-injury			
Average med payment to hospital providers	\$ 9,070	\$ 8,311	9.1%
Percentage of claims with hospital payment	65.0%	67.8%	-2.8 pts
Percentage claims treated inpatient	8.2%	7.1%	1.2 pts
Percentage claims treated outpatient	63.0%	66.0%	-2.7 pts
Percentage of payments to hospital	53.3%	45.7%	7.6 pts.
Percentage of payments inpatient	23.1%	18.1%	5.0 pts
Percentage of payments outpatient	30.3%	27.8%	2.4 pts
Average paid for hospital inpatient services	\$31,725	\$31,713	0.0%
Average paid for hospital outpatient services	\$ 5,607	\$ 5,323	5.3%

Source: CompScope Medical Benchmarks for Minnesota, 13th Edition. Workers Compensation Research Institute, 2013.

For claims at 12-month maturity (2010 claims measured in 2011) average payments to hospital providers were 9 percent higher in Minnesota than the median, although the percentage of claims with any hospital payments was slightly lower. Overall, hospitals received 53 percent of the medical payments, divided between 23 percent for inpatient services and 30 percent for outpatient services. All of these percentages were higher than the 16-state median.

Payments for hospital inpatient and outpatient services were very close to the median. Although 65 percent of Minnesota claims with more than seven days of lost time required hospital treatment during the first year after the injury, only 8 percent of the workers required inpatient services and 6 percent required inpatient surgery. Using claims at an average of 24 months after the injury date, average hospital payments for an inpatient episode were very close to the 16-state median and average payments for an inpatient surgery episode, adjusted to \$29,600, were 12 percent below the median (see Table A-4).

Table A-4. Comparison of Minnesota hospital inpatient surgery measures with median state values

2009 claims with more than 7 days lost time measured at 24 months average post-injury, adjusted for industry and injury mix	Minnesota	16-state median	MN value compared to median
Average hospital paid per inpatient episode	\$25,233	\$25,062	0.7%
Average hospital paid per inpatient episode w/ surgery	\$29,606	\$33,615	-11.9%
Percentage claims inpatient	9.9%	8.3%	1.6 pts
Percentage inpatient episodes with surgery	55%	50%	5 pts
Percentage claims with inpatient surgery	6.2%	4.5%	1.7 pts

Source: CompScope Medical Benchmarks for Minnesota, 13th Edition. Workers Compensation Research Institute, 2013.

WCRI Medical Benchmarks include a separate analysis of hospitalization care for low back cases with disc conditions, measured at an average of 24 months after the injury (see Table A-5). Injured workers in Minnesota were twice as likely as workers in the median state to receive inpatient care for their condition and they were more likely to receive surgery. While 68 percent of the surgeries in Minnesota were performed during inpatient hospital encounters, only 48 percent of the surgeries in the median state were inpatient. Perhaps because a wider range of surgeries are performed on hospital inpatients, the average total medical costs and hospital costs for an inpatient surgery episode are slightly lower in Minnesota. Costs for outpatient back surgeries are substantially lower in Minnesota, but this may be the result of injured workers receiving surgeries as an outpatient in other states that are more likely to be performed as an inpatient in Minnesota.

WCRI also tracks the cumulative changes in the hospital measures. Table A-6 shows the cumulative change among claims measured at an average of 12 months after the injury, comparing values from 2005 claims with values from 2010 claims. The average hospital payment for Minnesota claims increased by nearly 33 percent, slightly above the median growth of 31 percent. Minnesota's average hospital payment for inpatient services increased 48 percent and the average paid for hospital outpatient services increased by 46 percent, both about the rate of their respective medians.

Table A-5. Comparison of Minnesota hospital and surgery measures with median state values for low back cases with disc conditions

2009 claims with more than 7 days lost time measured at 24 months average post-injury, adjusted for industry and injury mix	Minnesota	16-state median	MN value compared to median
Percentage with inpatient care	32%	16%	16 pts
Percentage with surgery	40%	33%	7 pts
Percentage of surgery outpatient	32%	52%	-20 pts
Percentage of surgery inpatient	68%	48%	20 pts
Average total medical paid per inpatient surgery episode	\$30,973	\$32,818	-5.6%
Average total medical paid per outpatient surgery episode	\$12,444	\$16,682	-25.4%
Average hospital paid per inpatient surgery episode	\$24,901	\$25,618	-2.8%

Source: CompScope Medical Benchmarks for Minnesota, 13th Edition. Workers Compensation Research Institute, 2013.

Table A-6. Comparison of 2005 to 2010 cumulative percentage change in Minnesota hospital payments for claims with median state values

Claims with more than 7 days lost time measured at 12 months average post-injury, 2005 claims and 2010 claims	Minnesota	16-state median	MN value compared to median
Average hospital payment	32.6%	30.7%	1.9 pts
Average hospital payment for inpatient services	47.8%	42.9%	4.9 pts
Average hospital paid for outpatient services	46.4%	30.9%	15.5 pts

Source: CompScope Medical Benchmarks for Minnesota, 13th Edition. Workers Compensation Research Institute, 2013.

Appendix B

Survey procedures

Three teams of staff members of the Department of Labor and Industry (DLI) created a set of survey instruments to gather information about issues relating to medical cost reimbursement, payment mechanics and dispute-process-related costs in Minnesota's workers' compensation system. Different versions of the surveys were drafted for insurers and self-insured employers, hospitals and ambulatory surgical centers (ASCs). The final versions of the surveys are presented in Appendix C.

The survey participants were identified through both internal and external sources. The 20 largest workers' compensation insurance companies and the 20 largest self-insured employers were identified from the DLI *Prompt First Action Report on Workers' Compensation Claims, Fiscal-year 2012*, which includes a table showing the number of claims for indemnity benefits filed by each insurer or self-insured employer.⁴⁸ Because Assigned Risk Plan claims are handled by three different companies, the final count of insurers was 22 companies. The self-insurers included both individual companies and groups and covered both the private and public sectors. The selected insurers accounted for 76 percent of the total cases filed for workers' compensation benefits by insurers in 2012 and the selected self-insured employers accounted for 68 percent of the self-insured total. The contact person for the mailing was the person or office that receives the annual notice of workers' compensation assessment payment from DLI.

The Minnesota Department of Health provided a list of the 20 hospitals with the largest amount of workers' compensation payments in 2011. The Minnesota Hospital Association provided contact information for these hospitals. Because of the concentration of these hospitals in Minneapolis, St. Paul and a few other large cities, a few hospitals in smaller cities were added to provide geographic diversity. The resulting list included 14 health care systems, operating 24 hospitals.

The Minnesota Ambulatory Surgery Center Association provided a list of 20 ASCs and their contacts, including one company with two locations.

The survey instruments were mailed to each participant group July 11, 2013, along with a cover letter explaining the statutory basis for the survey. Recipients were also provided with contact information at DLI to request electronic versions in either text or spreadsheet formats.

Respondents provided feedback that the wording on a few questions was unclear and DLI sent revised surveys to all participants, between July 23 and July 31. DLI also sent a letter to all hospitals and ASCs explaining how to properly indicate that particular survey responses are to be considered proprietary information.

DLI researchers reviewed the survey responses; responses requiring revision (such as percentage listings where the total did not equal 100 percent) were sent to the respondents Aug. 22 and thereafter, as surveys were received. Participants who had not yet returned completed surveys were sent reminders in early September. Responses from many self-insured

⁴⁸The insurer and self-insurer table is available at www.dli.mn.gov/WC/Pdf/prompt12table.pdf.

employers were prepared by their third-party administrators and a few insurers submitted information prepared by their bill-review vendors.

This report includes information from 18 insurers (including all three Assigned Risk Plan companies), 12 self-insured employers or groups, 17 hospitals or hospital groups representing 22 locations and 12 ASCs.

Appendix C-1

Survey instrument—hospitals

Minnesota Department of Labor and Industry Workers' Compensation Reimbursement Cost Study Hospital Questions

Please answer the following questions FOR INPATIENT SERVICES ONLY. Dollar amounts should be rounded to the nearest \$1000. Where charges or payments responsive to a question have not been finalized, provide your best estimate. For purposes of this questionnaire, note the following definitions:

- * "You" refers to the hospital to whom this questionnaire is addressed.
- * "Spaeth" is a court decision that allows a health care provider, upon denial of liability for a patient's WC claim or medical condition, to submit its bill to the patient's health insurance company. If the workers' compensation payer ultimately pays the claim, Spaeth requires the WC payer to pay the health care provider any additional amounts that are payable under the WC law.
- * **"Dispute" means ANY DISAGREEMENT about a charge or payment that prompted additional communication or action, including a phone call, a letter, sending additional information or initiating a legal proceeding.**

Hospital:	
Contact person for survey:	
Phone:	
E-mail:	

1. What total amount did you charge to WC payers (insurance companies, self-insured employers and groups, and third party administrators) for inpatient services, articles and supplies provided in 2011?
2. What total amount did WC payers pay you in 2011 for inpatient services, articles and supplies?
3. How many inpatients did you treat during 2011 who had WC claims for their inpatient services?
 - a. How many of those had bills that were disputed at the Department of Labor and Industry (DLI) or the Office of Administrative Hearings (OAH)?
4. For 2012, what percentage of WC inpatient bills did you transmit electronically via Form 837?

Of these, what percentage —

 - a. Did the payer confirm electronically via Form 277?
 - b. Did the payer confirm electronically via Form 835?
5. For 2012, on what percentage of your WC inpatient bills did you receive payment via EFT?

6. On what percentage of your WC inpatient bills for 2011 did you make a prior-authorization request?
- Of this percentage, what percentage —
- a. Were approved and paid without dispute?
 - b. Were denied and the employee did not dispute the denial?
 - c. Were denied and the employee disputed the denial?
7. On what percentage of your 2011 WC inpatient bills did you dispute nonpayment or the amount of payment?
- Of these disputed bills, what percentage —
- a. Related to disputes where no proceeding was initiated (by the filing of a medical request or claim petition) at DLI or OAH?
 - b. Related to disputes where you initiated a proceeding at DLI or OAH?
 - c. Related to disputes where you intervened in a proceeding and there was not a *Spaeth* balance?
 - d. Related to disputes where you intervened in a proceeding and there was a *Spaeth* balance?
8. Of all the charges on the disputed bills in #7, what percentage did you eventually receive as payment?
- a. Overall?
 - b. Where you initiated a proceeding at DLI or OAH?
 - c. Where you intervened in a proceeding and there was not a *Spaeth* balance?
 - d. Where you intervened in a proceeding and there was a *Spaeth* balance?
9. What was the cost of running your billing and collection system for WC inpatient services in 2011, as a percentage of the total payments received for WC inpatient services in that year (include in-house and vendor costs, dispute and non-dispute costs)?
10. What percentage of your WC inpatient bill and collection system cost for 2011 was dispute-driven?
- Of that dispute-driven component, what percentage —
- a. Related to disputes where no proceeding at DLI or OAH was initiated (by the filing of a medical request or claim petition)?
 - b. Related to disputes where you initiated a proceeding at DLI or OAH?
 - c. Related to disputes in which you intervened in a proceeding and there was not a *Spaeth* balance?
 - d. Related to disputes in which you intervened in a proceeding and there was a *Spaeth* balance?
11. On what percentage of your WC inpatient bills for 2011 did the WC payer initially deny any charges?
- a. What percentage of these denied bills did you then submit to the employee or his/her health insurance payer?
 - b. Regarding the bills you submitted to the employee or health insurance payer, on what percentage did you collect a co-payment, deductible or other payment from the employee?

12. What was the payment turnaround, from initial billing to final payment, for WC inpatient bills for 2011 —

a. Percentage of non-disputed inpatient bills paid within —

- i. 0-30 days
- ii. 31-60 days
- iii. 61-90 days
- iv. > 90 days

b. Percentage of disputed inpatient bills paid within —

- i. 0-30 days
- ii. 31-60 days
- iii. 61-90 days
- iv. > 90 days

13. List the vendors and partners you use to help process WC medical bills (i.e., the entities your workers' compensation inpatient billings go through to reach the payer). (Add lines if necessary.)

Vendor/partner #1:

Vendor/partner #2:

Vendor/partner #3:

For 2011, what was your total cost of transmitting WC inpatient bills to the payer —

- a. As a percentage of total WC inpatient payments?
- b. As an average per bill?

14. For the following procedures provided on an inpatient basis during 2011, please list the median payment you received from each of your top five (by dollar volume) commercial insurers and the median payment received from your top three Minnesota WC payers (combined). Include payment for all services, articles and supplies provided (including implants) EXCEPT those for professional services.*

CPT code	Comm'l payer 1	Comm'l payer 2	Comm'l payer 3	Comm'l payer 4	Comm'l payer 5	MN WC
22851 Apply spine prosth device						
63047 Remove spine lamina 1 Imbr						
63030 Low back disk surgery						
22612 Lumbar spine fusion						
22845 Insert spine fixation device						
12001 Rpr s/n/ax/gen/trnk 2.5cm/<						
29826 Shoulder arthroscopy/surgery						
12002 Rpr s/n/ax/gen/trnk 2.6-7.5cm						
64721 Carpal tunnel surgery						
62311 Inject spine lumbar/sacral						

* If you cannot provide the information requested above, please provide a copy of the agreement between you and each of your five top commercial health insurers that governs reimbursements for the above services, articles and supplies (including implants) other than professional fees.

Your responses to the remaining questions should relate to both inpatient and outpatient cases.

15. How do you determine what to charge for implants in Minnesota WC cases? (For purposes of this question, “implants” are any single-use item that is surgically inserted and not intended to be removed within six weeks INCLUDING plates, cages, prosthetic/orthotic devices, pain pumps and permanent neuro-stimulators but EXCLUDING rods, pins, screws or similar devices.)

a. What formula do you use, if any?

b. For implants in 2011, what was the median percent mark-up over the price you paid the supplier(s)?

16. In 2011, from whom did you purchase implants — the manufacturer or a different entity such as a distributor? Please describe.

17. For 2011, did you receive discounts or rebates from any implant suppliers or manufacturers? (Yes/No)

If so, please describe the types and the amounts.

Appendix C-2

Survey instrument—ambulatory surgical centers

Minnesota Department of Labor and Industry Workers' Compensation Reimbursement Cost Study Ambulatory Surgical Center Questions

Please answer the following questions. Dollar amounts should be rounded to the nearest \$1000. Where charges or payments responsive to a question have not been finalized, provide your best estimate. For purposes of this questionnaire, note the following definitions:

- * "You" refers to the ambulatory surgical center to whom this questionnaire is addressed.
- * "Spaeth" is a court decision that allows a health care provider, upon denial of liability for a patient's WC claim or medical condition, to submit its bill to the patient's health insurance company. If the workers' compensation payer ultimately pays the claim, Spaeth requires the WC payer to pay the health care provider any additional amounts that are payable under the WC law.
- * **"Dispute" means ANY DISAGREEMENT about a charge or payment that prompted additional communication or action, including a phone call, a letter, sending additional information or initiating a legal proceeding.**

Ambulatory surgery center:
Contact person for survey:
Phone:
E-mail:

1. What total amount did you charge to WC payers (insurance companies, self-insured employers and groups, and third party administrators) for services, articles and supplies provided in 2011?
2. What total amount did WC payers pay you in 2011 for services, articles and supplies?
3. How many patients did you treat during 2011 who had WC claims for their services?
 - a. How many of those patients had bills that were disputed at the Department of Labor and Industry (DLI) or the Office of Administrative Hearings (OAH)?
4. For 2012, what percentage of WC bills did you transmit electronically via Form 837?

Of these, what percentage —

 - a. Did the payer confirm electronically via Form 277?
 - b. Did the payer confirm electronically via Form 835?
5. For 2012, on what percentage of your WC bills did you receive payment via EFT?

6. On what percentage of your WC bills for 2011 did you make a prior-authorization request?

Of this percentage, what percentage —

- a. Were approved and paid without dispute?
- b. Were denied and the employee did not dispute the denial?
- c. Were denied and the employee disputed the denial?

7. On what percentage of your 2011 WC bills did you dispute nonpayment or the amount of payment?

Of these disputed bills, what percentage —

- a. Related to disputes where no proceeding was initiated (by the filing of a medical request or claim petition) at DLI or OAH?
- b. Related to disputes where you initiated a proceeding at DLI or OAH?
- c. Related to disputes where you intervened in a proceeding and there was not a *Spaeth* balance?
- d. Related to disputes where you intervened in a proceeding and there was a *Spaeth* balance?

8. Of all the charges on the disputed bills in #7, what percentage did you eventually receive as payment?

- a. Overall?
- b. Where you initiated a proceeding at DLI or OAH?
- c. Where you intervened in a proceeding and there was not a *Spaeth* balance?
- d. Where you intervened in a proceeding and there was a *Spaeth* balance?

9. What was the cost of running your billing and collection system for WC services in 2011, as a percentage of the total payments received for WC services in that year (include in-house and vendor costs, dispute and non-dispute costs)?

10. What percentage of your WC billing and collection system cost for 2011 was dispute-driven?

Of that dispute-driven component, what percentage —

- a. Related to disputes where no proceeding at DLI or OAH was initiated (by the filing of a medical request or claim petition)?
- b. Related to disputes where you initiated a proceeding at DLI or OAH?
- c. Related to disputes in which you intervened in a proceeding and there was not a *Spaeth* balance?
- d. Related to disputes in which you intervened in a proceeding and there was a *Spaeth* balance?

11. On what percentage of your WC bills for 2011 did the WC payer initially deny any charges?

- a. What percentage of these denied bills did you then submit to the employee or his/her health insurance payer?
- b. Regarding the bills you submitted to the employee or health insurance payer, on what percentage did you collect a co-payment, deductible or other payment from the employee?

12. What was the payment turnaround, from initial billing to final payment, for WC bills for 2011 —

a. Percentage of non-disputed bills paid within —

- i. 0-30 days
- ii. 31-60 days
- iii. 61-90 days
- iv. > 90 days

b. Percentage of disputed bills paid within —

- i. 0-30 days
- ii. 31-60 days
- iii. 61-90 days
- iv. > 90 days

13. List the vendors and partners you use to help process WC medical bills (i.e., the entities your workers' compensation billings go through to reach the payer). (Add lines as necessary.)

Vendor/partner #1:

Vendor/partner #2:

Vendor/partner #3:

For 2011, what was your total cost of transmitting WC bills to the payer —

- a. As a percentage of total WC payments?
- b. As an average per bill?

14. For the following procedures provided during 2011, please list the median payment you received from each of your top five (by dollar volume) commercial insurers and the median payment received from your top three Minnesota WC payers (combined). Include payment for all services, articles and supplies provided (including implants) EXCEPT those for professional services.*

CPT code	Comm'l payer 1	Comm'l payer 2	Comm'l payer 3	Comm'l payer 4	Comm'l payer 5	MN WC
64483 Inj foramen epidural l/s						
64415 N block inj brachial plexus						
29826 Shoulder arthroscopy/surgery						
29881 Knee arthroscopy/surgery						
64721 Carpal tunnel surgery						
64493 Inj paravert f jnt l/s 1 lev						
29824 Shoulder arthroscopy/surgery						
64494 Inj paraver f jnt l/s 2 lev						
62311 Inject spine lumbar/sacral						
29827 Arthroscop rotator cuff repr						

* If you cannot provide the information requested above, please provide a copy of the agreement between you and each of your five top commercial health insurers that governs reimbursements for the above services, articles and supplies (including implants) other than professional fees.

15. How do you determine what to charge for implants in Minnesota WC cases? (For purposes of this question, "implants" are any single-use item that is surgically inserted and not intended to be removed within six weeks INCLUDING plates, cages, prosthetic/orthotic devices, pain pumps and permanent neuro-stimulators but EXCLUDING rods, pins, screws or similar devices.)

a. What formula do you use, if any?

b. For implants in 2011, what was the median percent mark-up over the price you paid the supplier(s)?

16. In 2011, from whom did you purchase implants — the manufacturer or a different entity such as a distributor? Please describe.

17. For 2011, did you receive discounts or rebates from any implant suppliers or manufacturers? (Yes/No)

If so, please describe the types and the amounts.

Appendix C-3

Survey instrument—insurers

Minnesota Department of Labor and Industry Workers' Compensation Reimbursement Cost Study Insurer and Self-Insurer Questions

Please answer the following questions. Dollar amounts should be rounded to the nearest \$1000. Where charges or payments responsive to a question have not been finalized, please provide your best estimate. For purposes of this questionnaire, note the following definitions:

- * "You" refers to the insurer or self-insurer or to whom this questionnaire is addressed.
- * "Spaeth" is a court decision that allows a health care provider, upon denial of liability for a patient's WC claim or medical condition, to submit its bill to the patient's health insurance company. If the workers' compensation payer ultimately pays the claim, Spaeth requires the WC payer to pay the health care provider any additional amounts that are payable under the WC law.
- * "Dispute" means **ANY DISAGREEMENT** about a charge or payment that prompted additional communication or action, including a phone call, a letter, sending additional information or initiating a legal proceeding.

Insurer or self-insurer:	
Contact person for survey:	
Phone:	
E-mail:	

1. What total amount were you charged for medical services, articles and supplies provided in 2011 to WC claimants?
2. What total amount did you pay in 2011 for medical services, articles and supplies provided to WC claimants?
3. What is the total number of compensable WC injury claims (indemnity and medical-only) you received in 2011?
4. For 2012, what percentage of WC hospital bills did you receive electronically via Form 837?
Of these, what percentage —
 - a. Did you confirm electronically via Form 277?
 - b. Did you confirm electronically via Form 835?
5. For 2012, what percentage of WC non-hospital medical bills did you receive electronically via Form 837?
Of these, what percentage —
 - a. Did you confirm electronically via Form 277?
 - b. Did you confirm electronically via Form 835?
6. For 2012, what percentage of all WC medical bills did you pay via EFT?

7. On what percentage of medical bills for 2011 did you receive a prior authorization request?

Of this percentage, what percentage —

- a. Did you approve and pay without dispute?
- b. Did you deny and the employee did not dispute the denial?
- c. Did you deny and the employee disputed the denial?

8. On what percentage of the 2011 medical bills you received did a health care provider dispute nonpayment or the amount of payment?

Of this percentage, what percentage —

- a. Related to disputes where no proceeding was initiated (by the filing of a medical request or claim petition) at the Department of Labor and Industry (DLI) or the Office of Administrative Hearings (OAH)?
- b. Related to disputes where a proceeding was initiated by the provider at DLI or OAH?
- c. Related to disputes where a proceeding was initiated by the claimant and no providers intervened?
- d. Related to disputes where a provider intervened in the proceeding and there was not a Spaeth balance?
- e. Related to disputes where a provider intervened in the proceeding and there was a Spaeth balance?

9. Of the disputed bills in #8, what percentage involved —

- a. Hospital inpatient services?
- b. Hospital outpatient services?
- c. ASC facility services?
- d. All other medical services?

10. What was the cost of running your WC medical payment system in 2011, as a percentage of the total payments you made for WC services provided in that year (include in-house and vendor costs, dispute and non-dispute related costs)?

What percentage of this cost was attributable to —

- a. Hospital inpatient services?
- b. Hospital outpatient services?
- c. ASC facility services?
- d. All other medical services?

11. What percentage of your WC medical payment system cost for 2011 was dispute-driven?

Of that dispute-driven component, what percentage —

- a. Related to disputes where no proceeding was initiated (through the filing of a medical request or claim petition) at DLI or OAH?
- b. Related to disputes where a health care provider initiated the proceeding?
- c. Related to disputes where a proceeding was initiated by the employee and no health care provider intervened?
- d. Related to disputes where a provider intervened in the proceeding and there was NOT a Spaeth balance?
- e. Related to disputes where a provider intervened and there was a *Spaeth* balance?

12. What percentage of the 2011 cost of your WC medical payment system was for vendor services?

What percentage of that amount was for —

- a. Benefit managers?
- b. TPAs?
- c. Bill reviewers?
- d. Clearinghouses?
- e. IMEs (other than those appointed by OAH)?
- f. Other?

Specify other:

13. What percentage of the claims identified in your response to #3 included at least one IME requested by you?

14. What is the average cost of the IMEs referenced in your response to #13?

15. In the disputed bills for 2011 indicated in #8, what amount did you pay, as a percentage of all the charges on those bills —
- a. Overall?
 - b. Where the provider initiated the dispute?
 - c. Where the claimant initiated the dispute and the provider did not intervene?
 - d. Where the provider intervened and there was not a *Spaeth* balance?
 - e. Where the provider intervened and there was a *Spaeth* balance?

16. What was your payment turnaround, from initial billing to final payment, for all WC medical bills other than for hospital inpatient services for 2011 —
- a. Percentage of non-disputed bills paid within —
- i. 0-30 days
 - ii. 31-60 days
 - iii. 61-90 days
 - iv. > 90 days

- b. Percentage of disputed bills paid within —
- i. 0-30 days
 - ii. 31-60 days
 - iii. 61-90 days
 - iv. > 90 days

17. What was your payment turnaround, from initial billing to final payment, for WC hospital inpatient bills for 2011 —
- a. Percentage of non-disputed inpatient bills paid within —
- i. 0-30 days
 - ii. 31-60 days
 - iii. 61-90 days
 - iv. > 90 days

b. Percentage of disputed inpatient bills paid within—

- i. 0-30 days
- ii. 31-60 days
- iii. 61-90 days
- iv. > 90 days

18. For the following procedures provided on an inpatient basis during 2011, please list the median charge you were billed and the median payment you made to your top ten (by dollar volume) hospitals (only those with more than 100 beds) under Minnesota’s workers’ compensation system. Include charges and payments for all services, articles and supplies (including implants) EXCEPT fees for professional services.

CPT code	Median charge	Median payment
22851 Apply spine prosth device		
63047 Remove spine lamina 1 lmb		
63030 Low back disk surgery		
22612 Lumbar spine fusion		
22845 Insert spine fixation device		
12001 Rpr s/n/ax/gen/trnk 2.5cm/<		
29826 Shoulder arthroscopy/surgery		
12002 Rpr s/n/ax/gen/trnk 2.6-7.5cm		
64721 Carpal tunnel surgery		
62311 Inject spine lumbar/sacral		

19. For the following procedures, please list the median charge you were billed and the median payment you made during 2011 to your top ten (by dollar volume) ambulatory surgical centers under Minnesota’s workers’ compensation system. Include charges and payment for all services, articles and supplies provided (including implants) EXCEPT those for professional services.

CPT code	Median charge	Median payment
64483 Inj foramen epidural l/s		
64415 N block inj brachial plexus		
29826 Shoulder arthroscopy/surgery		
29881 Knee arthroscopy/surgery		
64721 Carpal Tunnel surgery		
64493 Inj paravert f jnt l/s 1 lev		
29824 Shoulder arthroscopy/surgery		
64494 Inj paraver f jnt l/s2 lev		
62311 Inject spine lumbar/sacral		
29827 Arthroscop rotator cuff repr		

Appendix D

How workers' compensation medical care differs from other medical care systems

There are some fundamental differences between medical care provided through workers' compensation and through other health care systems. The most prominent difference is that workers' compensation medical care is delivered as part of the package of workers' compensation benefits, which includes indemnity benefits for lost wages and permanent disability, and vocational rehabilitation for lost employment.

Medical care and the injured worker's medical status influence eligibility for wage-loss benefits. Eligibility for wage-replacement benefits depends on the injured worker maintaining work disability status, which is largely based on their use of and need for medical care. Health care providers are also responsible for measuring the presence and extent of permanent disabilities that determine the amount of permanent partial disability benefits and eligibility for permanent total disability benefits.

The next most prominent difference, related to the first, is the limitation that workers' compensation medical care only includes services for work-related injuries and illnesses. Thus, early in a workers' compensation claim, the insurer needs to determine if an injury or illness is work-related and whether each medical services is for the treatment of the work injury or illness. When a workers' compensation insurer decides to deny primary liability for a workers' compensation claim and the injured worker does not contest the denial, then medical care shifts to the worker's health care insurance, if available. This shift also occurs when the insurer denies that a claimed medical condition is not related to the work injury (referred to as medical causation). When the insurer's decision to deny primary liability or medical causation for an injury or illness is disputed by the worker, the worker may initially receive medical care through an alternative medical insurance arrangement and expect to switch to workers' compensation insurance when the dispute is resolved. Sometimes medical services are delivered by health care providers without assurance of workers' compensation payment when the claim is in dispute, in the expectation that a resolution of the dispute will lead to payment for their services.

Workers and health care providers may perceive benefits and disadvantages of workers' compensation over other medical insurance. An advantage for injured workers is that workers' compensation medical benefits are paid in full by the workers' compensation insurers; the injured workers do not pay any deductibles or copayments. Health care providers often receive higher payments from workers' compensation insurers than from other health care insurers or programs. On the other hand, treatment for work injuries is denied more often than treatment under a group health policy based on the workers' compensation payer's review about whether each service provided is reasonable, necessary and related to the work injury. Providers are required to submit additional information to the payer or attorneys to support the need for the treatment, the relationship of the treatment to the work injury and the extent of the injury for purposes of payment of indemnity benefits and assisting the injured worker return to work. Providers are also asked to "intervene" in litigation or take a cut in reimbursement where there is a settlement, to get paid. Workers' compensation insurers also may require the worker to see a provider selected by the employer or insurer for an independent medical examination to determine whether the treatment is reasonable, necessary and related to the work injury.

The limitation of workers' compensation insurance to cover only work-related injuries and illnesses also applies to conditions that manifest themselves after a period of time has elapsed. For example, a workers' compensation insurer might contest that a worker's leg pain is related to a covered back injury. The insurer's contention might lead to extra tests and medical/legal examination to provide the parties with medical evidence to support their views.

Another important difference between workers' compensation medical benefits and other medical insurance is the workers' compensation insurer, after liability is assumed, is responsible for the worker's medical care for that injury or illness, and its related conditions, for the entire duration of the medical episode or until litigation or a settlement is reached to terminate the insurer's liability. Even though an employer may change its workers' compensation insurer, the workers injured while the policy was in effect by the prior insurer remain covered by that insurer.

These differences in the relationship between workers (the health care patients) and workers' compensation insurers affect the interactions of the insurers, workers and the health care providers. This complex set of interactions is played out thousands of times each year within the context of the workers' compensation medical reimbursement system.

Appendix E

Fee regulation systems in workers' compensation and Medicaid

This appendix summarizes information collected and reported by the Workers Compensation Research Institute for state workers' compensation systems and by CGI Federal for state Medicaid programs.^{49,50}

Hospital inpatient fee regulation

The distribution of hospital inpatient fee regulation systems is shown in Table E-1. Seventeen states use a diagnosis-related group (DRG) system to regulate their hospital inpatient fees, followed by per diem systems and percent-of-charge systems, each used in 10 states. Seven states use hospital-specific cost-to-charge ratios, including one state that combines it with other reimbursement methods. Three states combine DRG-based and per-diem systems, and three other states combine DRG-based and percent-of-charges systems. Only two states, Minnesota and Wyoming, reimburse hospitals according to their usual and customary charges. Minnesota is characterized as having a combination of percent-of-charges and usual-and-customary reimbursement.

Table E-1. Hospital inpatient fee regulation

Type of regulation	Number of states ¹	Use hospital-specific fees	Reimbursement levels differ by		
			Location	Size	Type
Per diem	10	4	2	1	4
DRG	17	9	2	1	5
Percent of charges	10	2	1	3	2
Usual and customary	2	0	0	1	0
Cost to charge	7	6	0	1	0
Per service or procedure	3	1	0	0	0
Other	2	1	0	0	0
No fee regulation	10	--	--	--	--

1. States can be classified in more than one category.

Source: Coomer, N. *National inventory of workers' compensation fee schedules for hospitals and ambulatory surgical centers*. Workers Compensation Research Institute, 2010.

Only nine states have the same allowable fee levels for all hospitals; the rest either differentiate among hospitals by location, size or type, or they use hospital-specific fee levels. Nine of the 17 states that use DRG-based systems also have different allowable fees for individual hospitals.

⁴⁹Information current as of Sept. 30, 2009. Coomer, N. *National Inventory of Workers' Compensation Fee Schedules for Hospitals and Ambulatory Surgical Centers*. Workers Compensation Research Institute, 2010.

⁵⁰*Report on Workers' Compensation Reimbursement Methodologies*. CGI Federal, 2011. The tables are based on Quinn, K. and Courts, C., *Sound practices in Medicaid payment for hospital care*. Center for Healthcare Strategies, 2010.

The majority of state Medicaid programs, including Minnesota's, use a DRG-based reimbursement system for inpatient care for the nonmanaged-care part of their programs. Thirty states use a DRG-based system, eight states use a per-diem reimbursement, four states use a non-DRG per-stay system and five states use a cost-based reimbursement system.

DLI survey on implementation and effect of DRG reimbursement

During July 2013, DLI sent a survey to 16 of the states that use a DRG system about their implementation of this system and the results of DRG inpatient fee regulation. Responses were received from 11 states. Two of the states implemented a DRG system prior to 2000, five states implemented a DRG system between 2006 and 2008, and four states adopted a DRG system in 2010 or later. The DRG system replaced percent-of-charge systems in four states, a cost-to-charge system in two states, usual-and-customary charges in two other states and a mixed system in one state. (Some states did not respond to each question.) All 10 responding states indicated they used the Medicare DRG system, primarily MS-DRG, with two states using an alternative grouper system.

The states were asked whether there was a reduction in medical disputes following the change to the DRG system, but little – if any – research was reported by the states. Montana responded that its medical-dispute rate was unchanged and Texas reported a reduction in the number of disputes (although this might be related to changes in the number of claims).

The states were also asked whether changing to a DRG payment system had any effect on system costs. For some of the states, the overall impact was designed to be cost neutral. Most states have not done any research and do not have data available. Montana responded that an independent analyst, conducting research for a more-recent law change, found a significant cost decrease due to use of DRG systems.

Hospital outpatient fee regulation

The distribution of states by type of hospital outpatient fee regulation is shown in Table E-2. Thirteen states use a service or procedure-specific fee regulation system. Twelve states, including Minnesota, use a percent-of-charge system, followed by 11 states using the ambulatory payment classification (APC) system or another service/procedure grouping method. A few states use combinations of different types of fee regulation; Minnesota is characterized as using percent-of-charges, usual-and-customary and per-service or per-procedure regulations.

Compared to inpatient services, there is less grouping of hospitals by location, size and type. Eighteen states use hospital-specific fee regulation and 16 states have the same allowable fee regulation for all hospitals.

State Medicaid programs are much more likely to use a cost-to-charge ratio for reimbursement of outpatient services. Twenty-four states use a cost-reimbursement system. Minnesota and eight other states use the Center for Medicare and Medicaid Service's APC system. Thirteen states primarily use their own fee schedule for outpatient services and three states use an ambulatory patient group (APG) system, which bundles more services than the APC system. Two of the cost reimbursement states are also moving to an APG system.

Table E-2. Hospital outpatient fee regulation

Type of regulation	Number of states ¹	Use hospital-specific fees	Reimbursement levels differ by		
			Location	Size	Type
Percent of charges	12	2	1	3	2
Usual and customary	4	0	0	1	0
Cost to charge	5	4	0	0	0
Per service or procedure	13	3	2	1	0
APC or other grouping	11	8	0	0	3
Other	5	3	1	0	0
No fee regulation	9	--	--	--	--

1. States can be classified in more than one category.

Source: Coomer, N. National inventory of workers' compensation fee schedules for hospitals and ambulatory surgical centers. Workers Compensation Research Institute, 2010.

Hospital outpatient cost index

The Workers Compensation Research Institute created a hospital outpatient cost index based on services for shoulder and knee surgeries.⁵¹ The index was scaled so the score for the median state was set to 100 points. Scores for the 20 states in their analysis ranged from a low of 39 percent of the median value to a high of 51 percent above the median value. Minnesota's index value was 26 percent above the median, the seventh highest. Previous publication of the index, in 2006 and 2008, set Minnesota at eighth highest.

The index rankings closely follow the reimbursement regulation method used in the states. States using a fixed-amount fee schedule had the lowest index values. Fixed-amount fee schedules include regulation on a per-procedure basis, often using current procedural terminology (CPT) codes or a resource-grouping system, such as the APC. States that used no fee schedule or a percent-of-charge regulation had higher index values. Three of the five states with the highest index values were states without an outpatient fee schedule.

The Workers' Compensation Research Institute also showed the trend in the index from 2005 through 2010. Minnesota's 2010 index value was 42 percent higher than its 2005 value. This was the sixth-highest trend value, which ranged from a 10 percent decrease to a 55 percent increase.

Ambulatory surgery center fee regulation

The distribution of states by type of fee regulation for ASC services is shown in Table A-3. There is much less variation in the type of fee regulation for ASCs than for hospital services. APC or another grouping method is used by 18 states and the percent-of-charges method is used by 12 states. Only one state, Colorado, uses both methods. Ten of the 11 states that use a service grouping method for hospital outpatient services also use that method for

⁵¹ Fomenko, O. and Yang, R. *Hospital Outpatient Cost Index for Workers' Compensation, 2nd edition*. Workers Compensation Research Institute, 2013.

ASCs. Minnesota’s ASC fee-regulation system is characterized as a combination of percent-of-charges, usual-and-customary and fee-per-service or fee-per-procedure systems.

Only four states take ASC location into account and one state considers ASC size. All ASCs use the same allowable fee regulation in 22 states and ASC-specific fees are used in 16 states.

State Medicaid programs generally use a version of the Medicare ASC fee schedule or their own fee schedule. Some states use an older version of the Medicare system that assigns ASC services to one of nine groups.

Table E-3. Ambulatory surgical center fee regulation

Type of regulation	Number of states ¹
Percent of charges	12
Usual and customary	3
Cost to charge	1
Per service or procedure	9
APC or other grouping	18
Other	4
No fee regulation	9

1. States can be classified in more than one category.

Source: Coomer, N. National inventory of workers' compensation fee schedules for hospitals and ambulatory surgical centers. Workers Compensation Research Institute, 2010.

Appendix F

Inpatient charge and payment variations in Medicare

The base level of information used in hospital reimbursement is the hospital’s listed price of services, called the charge master. The Centers for Medicare and Medicaid Services (CMS) requires that hospitals use the same charge master for all patients, regardless of the payment source. Payments vary between payers using the same hospital because of managed care systems, price negotiations and legal constraints. CMS has published national and state averages for the 100 most common Medicare DRGs paid during federal-fiscal-year 2011.⁵² The CMS data shows there is a wide range of charges among states and among hospitals within a state, and there is also a somewhat narrower range of payments that hospitals receive from Medicare for the same set of services and procedures.

While the population of Medicare patients differs in significant ways from the population of injured workers – and one would not expect the same costs for treatment of elderly and working-age patients – the Medicare payment levels are used as a starting point in the calculation of workers’ compensation hospital inpatient reimbursement in many states. In states that use a cost-plus-percentage or percent-of-charges reimbursement method, each hospital’s charge master is used to determine payment levels.

Among the 100 most common DRGs, four DRG classifications are also likely to be found in workers’ compensation systems, and these all involve back and spine procedures. Nationally, the average payments for these four DRGs are in the range of 24 to 29 percent of average charges submitted to CMS.

Table F-1 shows the highest and lowest average Medicare hospital charges and payments for each of these four DRGs, among Minnesota hospitals with at least 11 discharges for that DRG. Minnesota hospitals have a wide range of charges and a relatively narrower range of payments. The hospitals with the highest ratio of payments to charges are paid at least half of their charges, while the hospitals with the lowest ratios are paid only about one-fourth of their charges.

Table F-1. Highest and lowest hospital average Medicare inpatient charges and payment for selected conditions, Minnesota hospitals, federal-fiscal-year 2011 [1]

Medical condition (DRG number)	Highest average charge	Lowest average charge	Highest average payment	Lowest average payment	Highest ratio of payments to charges	Lowest ratio of payments to charges
Spinal fusion except cervical (460)	\$ 97,873	\$ 26,133	\$ 35,649	\$ 22,616	96.9%	25.9%
Cervical spinal fusion (473)	\$ 61,020	\$ 32,815	\$ 19,411	\$ 13,013	56.3%	26.9%
Back and neck procedure except spinal fusion (491)	\$ 34,809	\$ 13,004	\$ 24,423	\$ 5,730	49.9%	21.3%
Medical back problems (552)	\$ 24,181	\$ 8,980	\$ 19,757	\$ 4,583	63.2%	23.0%

1. Selected conditions exclude cases with complicating conditions. FFY is the Federal Fiscal Year, which begins on October 1 and ends on September 30 of the indicated year.

Source: Centers for Medicare and Medicaid Services website for Medicare provider data, www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Inpatient.html

⁵²Centers for Medicare and Medicaid Services website for Medicare provider data, www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Inpatient.html.