



Medicare and Workers Compensation Medical Cost Containment

Executive Summary

Medicare influences workers compensation medical cost containment in several important ways, including:

- Medicare pays a significant share of overall US medical costs. As a result, Medicare reimbursement rates influence prices generally paid for medical services, including prices paid for medical services for workers compensation.
- Many states base their workers compensation medical fee schedules on the Medicare physician reimbursement schedule.
- Some states control costs for services provided by facilities through systems based on either Medicare's DRG system¹ for hospital stays or Medicare's APC system² for services provided at ambulatory surgical centers.

In states that base their workers compensation medical fee schedules on the Medicare physician reimbursement schedule, clearly workers compensation medical costs can be affected by changes to Medicare reimbursement rates. But workers compensation medical costs can also be affected by changes to either the underlying formulas Medicare uses to determine those reimbursement amounts or to the way Medicare allocates payments by type of service. Failures to account for changes to Medicare's methodology or for trends in how Medicare reimburses physicians in the various medical specialties might have reduced the effectiveness of some workers compensation physician fee schedules.

This paper looks at some aspects of the role that Medicare has played in workers compensation medical cost containment. Medicare confronts major near-term challenges, some in common with workers compensation. The tactics that Medicare uses to address those challenges might, in some cases, be worth considering for use in workers compensation. In addition to direct comparisons between Medicare and workers compensation, we use experience from Group Health to add perspective on the impact of workers compensation and Medicare fee schedules on workers compensation medical costs.³

The key points that this article discusses are:

- While there are administrative efficiencies from referencing the Medicare reimbursement formula, workers compensation fee schedules that do so must react appropriately to ongoing changes in Medicare methodology.
- Some workers compensation fee schedules have not been adjusted to account for changes in the relationships between Medicare reimbursements and prices paid by private payers or Medicare reimbursement relativities between service types. In some cases, this has allowed excessive reimbursements to specialists by workers compensation insurers.
- The proportion of workers compensation medical costs that are subject to physician fee schedules is declining, with proportionally more billings by facilities. To maintain the effectiveness of medical fee schedules, workers compensation might consider using Medicare billing approaches for hospital stays (DRG) and ambulatory services (APC), but in doing so should adapt Medicare models to workers compensation priorities.
- As the workforce ages, workers compensation might focus safety initiatives toward falls and hip injuries, where Medicare protocols should provide valuable insight in designing treatment guidelines.

¹ Medicare's DRG system reimburses for hospital stays based on Diagnosis-Related Groups, a patient classification system.

² Medicare's APC system reimburses based on the Ambulatory Payment Classification.

³ Group Health data used in this study was provided by Medstat, a Thomson Reuters company specializing in the collection and analysis of medical experience from employer-sponsored health benefit plans, including PPOs, HMOs, and traditional plans. Workers compensation data is sample data provided by carriers.

- Medicare faces enormous demographic and fiscal challenges. Workers compensation shares some of those challenges, and Medicare’s response might offer suggestions to enhance workers compensation medical cost containment.

Medicare, Workers Compensation, and the Economy

The persistent increase in the proportion of workers compensation benefits that go for medical care over the last 20 years is a small part of a much greater trend. The Centers for Medicare & Medicaid Services projects a one-point jump in the healthcare share of GDP from 16.6% in 2008 to 17.6% in 2009 [CMS-1]. That jump is due to a declining economy with no corresponding decline in the need for, or the price of, medical services. National health expenditures are projected to increase 5.5% in 2009, while GDP is expected see its first decline since 1949. Longer term trends are driven by technological advances that increase life expectancy. By 2018, national health spending is expected to be \$4.4 trillion and 20% of GDP [CMS-2].

As Medicare absorbs baby boomers, it will face an enormous fiscal challenge. By 2017, government spending (mostly Medicare and Medicaid) will account for about half of all US expenditures on healthcare [MPAC-1, p.7]. As shown in Chart 1, Medicare is expected to grow from 3.3% of GDP in 2010 to 10% in 2070 [MPAC-1, p. 8]. Facing such dramatic growth in expenditures, Medicare has become more aggressive in pursuing recoveries from insurance companies and other entities.

The workers compensation insurer’s liability is primary to Medicare for medical expenses to treat a workers compensation-compensable injury. A “Workers Compensation Medicare Set Aside” (WC MSA) is an arrangement that helps reduce the possibility of Medicare paying medical expenses due to a work-related injury. Retiring boomers and an aging workforce have focused greater attention on WC MSAs. The federal government is intensifying its efforts to make sure that all other benefit programs are correctly paying their share of medical costs of disabled individuals. WC MSAs provide a means for Medicare to coordinate with workers compensation. However, as the workers compensation and Medicare patient populations increasingly overlap, more resources will be required to coordinate coverage—adding administrative costs but also the potential to share information on medical cost containment.

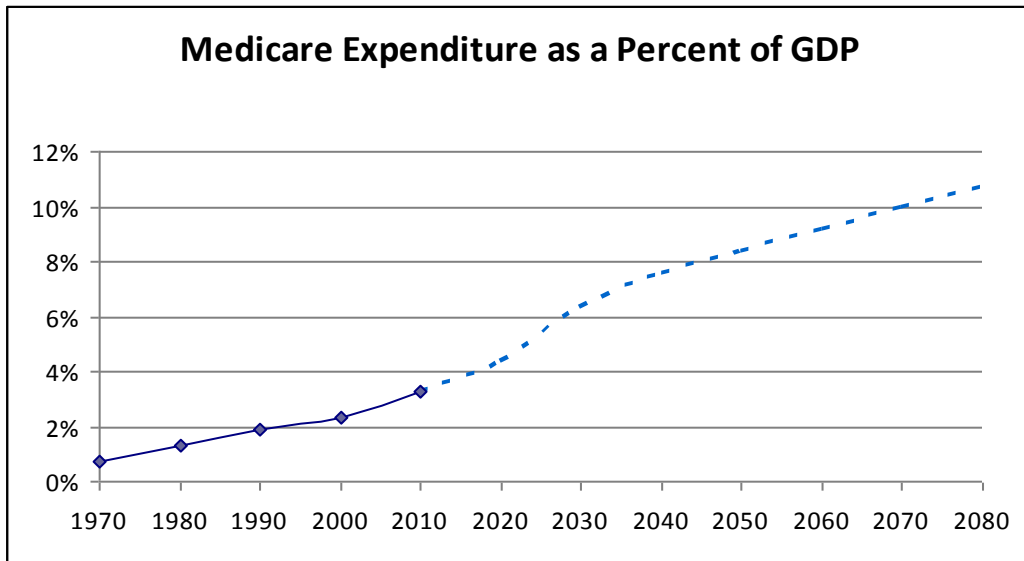


Chart 1: Medicare share of GDP is projected to grow dramatically over the next several decades [MedPAC-1, 2008, Chart 1–6, p. 8].

Many of the cost drivers increasing Medicare expenditure also drive up workers compensation medical benefit costs. But, as Chart 2 shows, after moving upward during most of the 1980s, the percentage of GDP spent on workers compensation medical benefits shows a mild downward trend following the workers compensation benefit reforms of the early 1990s. Both Medicare and workers compensation are subject to cost increases due to advances in medical technology. Medicare is more affected by the aging population than is workers compensation. Advances in job safety have led to decreases in the rates of work-related injuries. This has reduced workers compensation costs from what they otherwise would have been, and this is the major reason that the workers compensation medical share of GDP is relatively flat despite the various upward pressures on workers compensation medical costs.

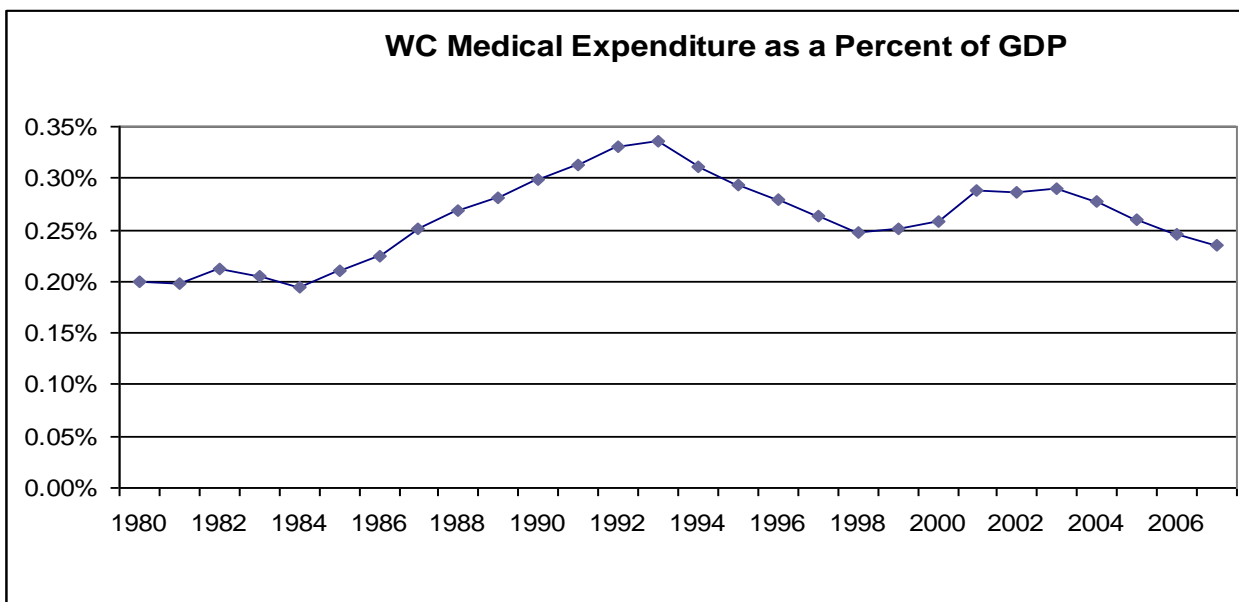


Chart 2: Share of GDP spent on workers compensation medical peaked in 1993 [CMS-1 and USBEA, Table 1.1.5. Gross Domestic Product].

Demographics of Aging

Driven by the boomer generation, the aging of the US workforce is an important cost driver for both Medicare and workers compensation. The recent sharp decline in the value of many investments intended to support retirement will almost certainly make this shift toward older workers even more pronounced. To better understand the implications of an aging workforce, this section discusses some basic demographic trends that workers compensation and Medicare are facing. For additional information, we direct the reader to the recent NCCI study *Claims Characteristics of Workers Age 65 and Above* available at ncci.com, which expands on many of the observations we note here.⁴

⁴ NCCI has produced a collection of studies dealing with the challenges to workers compensation posed by an aging workforce, including: *Younger Workers vs. Older Workers Going to the Emergency Room—Explaining Differences in Utilization and Price* (2007), *An Emerging Issue for Workers Compensation—Aging Baby Boomers and a Growing Long-Term Care Industry* (2007), *Age as a Driver of Frequency and Severity* (2006), and *Thinking About an Aging Workforce—Potential Impact on Workers Compensation* (2005).

Chart 3 shows how the US labor force has aged over the past decade. Comparing 1998 with 2008, the proportion employed has increased for all age groups above age 50 and declined for all the younger age groups. In particular, the participation rate for people over age 75 has increased more than 50%, from under 5% to over 7%.

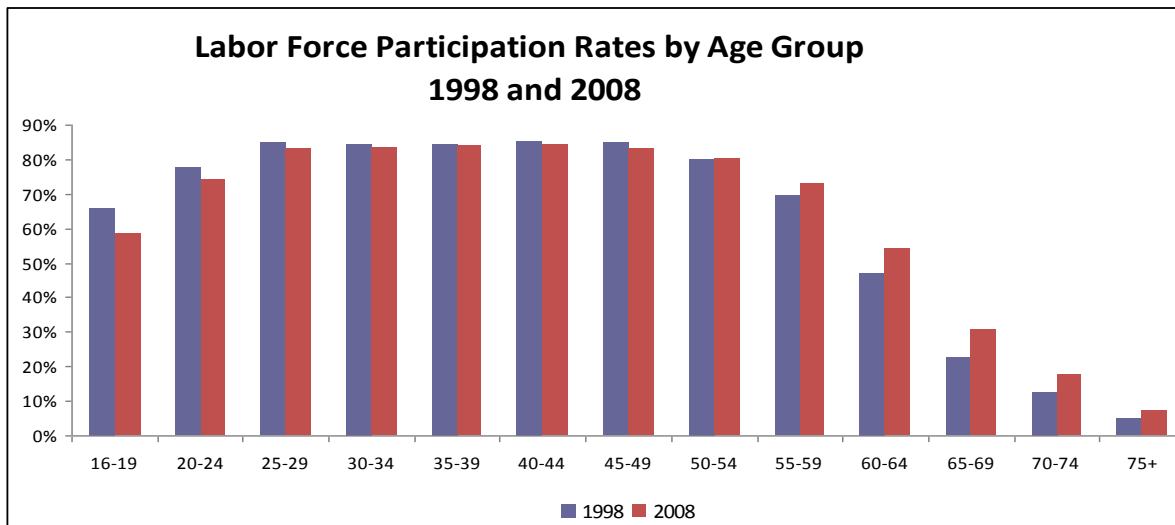


Chart 3: Over the past decade the percentage employed increased/decreased for all age-groups over/under age 50 [US Bureau of Labor Statistics (BLS): Current Population Survey (CPS)].

Like Medicare, workers compensation must confront the changing medical needs of this aging workforce. Chart 4 compares the distribution of employment by age layer with the corresponding distribution of workplace injuries and illnesses. For example, the proportion of injuries and illnesses from workers in the age-group 20 to 24 is about 10% greater than the proportion of workers in that age group, and so the relative claim frequency is highest for these young workers. By contrast, the over age 65 cohort shows the smallest ratio of injuries to covered employment: their injury proportion (2.2%) is only four-fifths of their proportion of the workforce (2.8%). That is, workers compensation claim frequency is lowest for the Medicare-eligible age group.

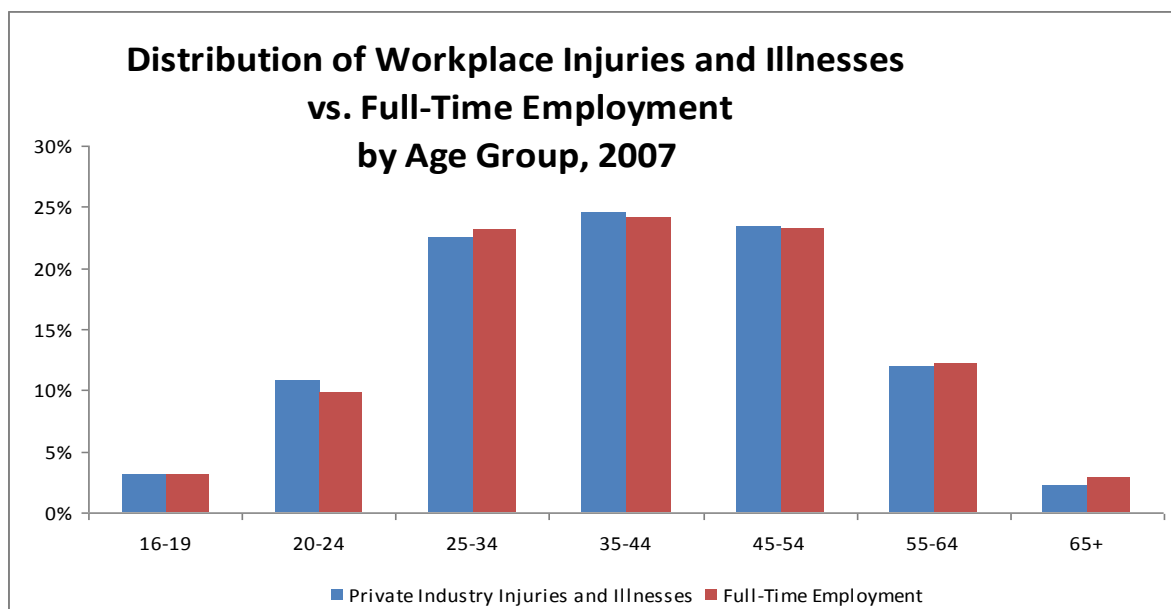


Chart 4: The proportion of workplace injuries and illnesses from Medicare eligible workers is 20% below their proportion of the workforce [US Bureau of Labor Statistics (BLS) 2007].

While a lower claim frequency for seniors might be due in part to more work experience, it is due primarily to older employees working in safer occupations. Chart 5 shows that workers over age 65 account for a higher relative proportion of workers in retail trade, where there is a comparatively low incidence of injuries. And conversely, a smaller proportion of Medicare-eligible workers are employed in more risky construction and manufacturing jobs.

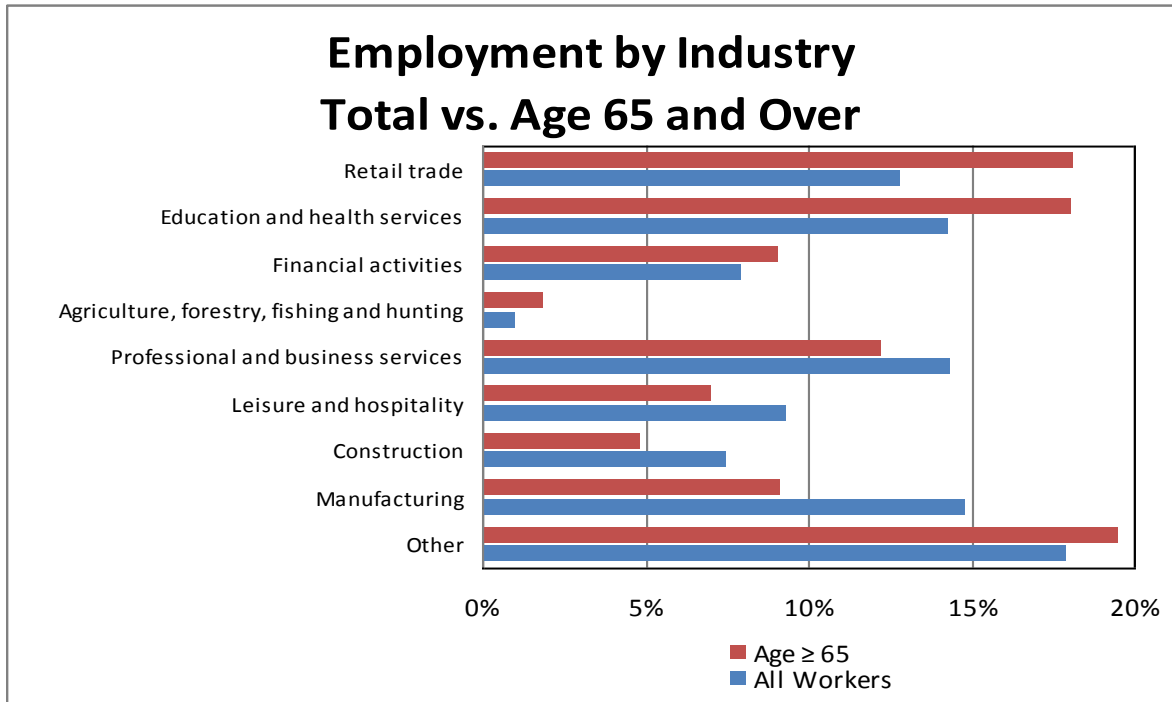


Chart 5: Medicare eligible workers are more likely to work in service industries and less likely to work in construction and manufacturing [Current Population Survey (CPS); excludes public administration, postal workers, and teachers].

Although Medicare-eligible workers show lower claim incidence rates than younger workers, the number of Medicare-eligible workers is increasing faster than the rest of the workforce. As a result, Medicare recipients will suffer more work-related injuries, and this has prompted the Centers for Medicare & Medicaid Services to become more aggressive in pursuing Workers Compensation Medicare Set Asides. By the same token, Medicare experience in treating older patients is expected to become more relevant to treating workplace injuries. NCCI Detailed Claim Information (DCI) compares several basic workers compensation claim characteristics according to whether the claimant is eligible for Medicare.

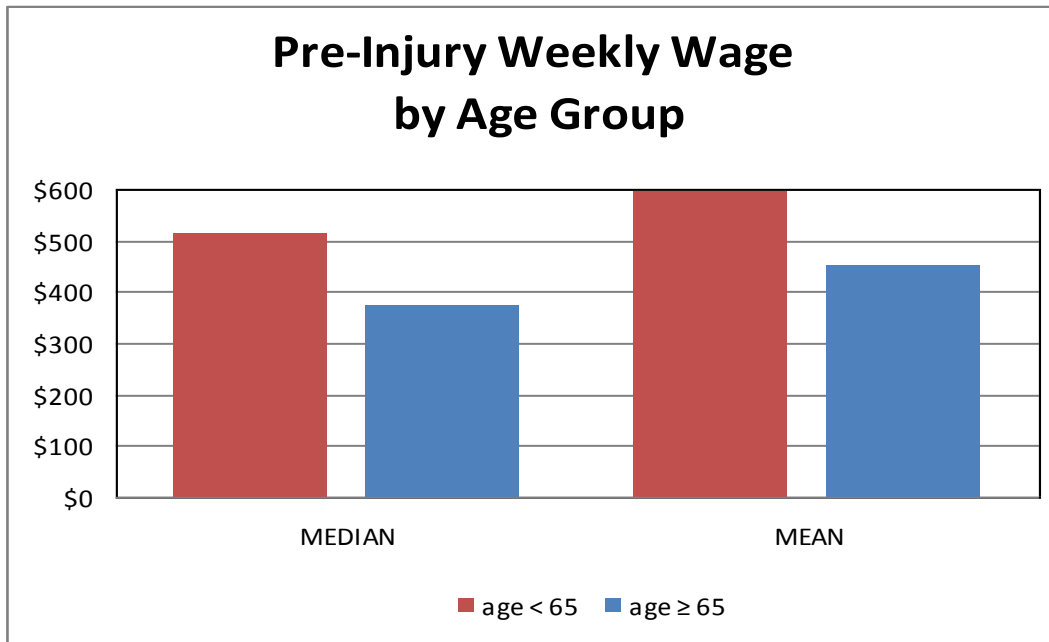


Chart 6: The average wages of Medicare-eligible injured workers is below that of younger workers compensation claimants (NCCI DCI Data; Accident Years 2004–2006, 2nd report).

Chart 6 shows that Medicare-eligible workers earn lower wages than younger workers. All else equal, that would translate into a smaller mean indemnity cost per case for older workers. As shown in Chart 7, however, that is not the case since both age groups show a mean indemnity cost per case of about \$12,000. On the other hand, the mean medical incurred cost is around \$3,000 greater for claimants over age 65. This is driven by longer recuperation times for older workers, which translate into longer benefit durations. The shift in the relative proportion of workers compensation benefits away from indemnity and toward medical is usually attributed to medical inflation outstripping wage growth. These observations on the wages and benefits of Medicare-eligible claimants reveal that an aging workforce has also contributed to that shift, and it is likely that this will continue.

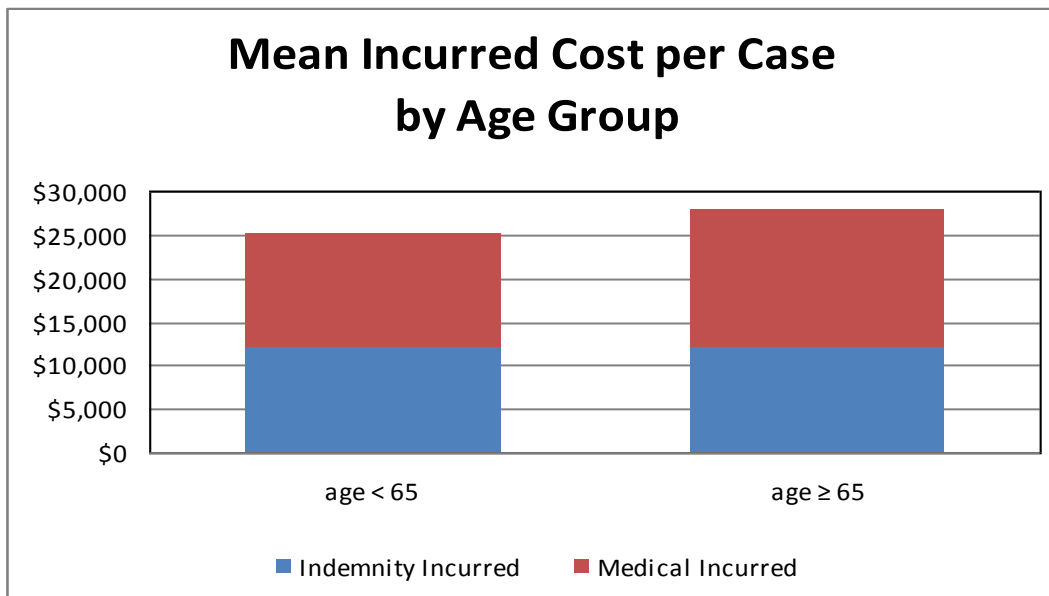


Chart 7: Despite lower wages, longer duration of disability for older workers result in similar indemnity but higher mean medical costs per workers compensation claim (NCCI DCI Data; Accident Years 2004–2006, 2nd report).

There are several notable, but not surprising, differences in the injuries of older workers:

- **Part of body:** Medicare-eligible workers are more likely to injure their hip and less likely to hurt their back.
- **Nature of injury:** Medicare-eligible workers are twice as likely to suffer a fracture and half as likely to suffer a strain or sprain.
- **Cause of injury:** Medicare-eligible workers are twice as likely to be injured in a fall.

Because seniors account for a growing portion of the workforce, this suggests that workers compensation insurers promote safety initiatives designed to prevent slips and falls and ensure that provider networks are equipped to provide hip replacements and related procedures.

Medicare and Workers Compensation Fee Schedules: Role of the Medicare RBRVS

Demographics imply that Medicare experience is becoming more relevant to the treatment of workplace injuries. Medicare has, however, long had a considerable influence on workers compensation insurance, especially in the area of medical cost containment. We now discuss how Medicare reimbursement strategies have historically impacted workers compensation statutory benefits, with particular attention to the role that the Medicare Resource-Based Relative Value Scale (RBRVS) has had on workers compensation medical fee schedules.

The growth of the Medicare system has made it the dominant payer for medical care. More and more, Group Health insurers base their reimbursements on what Medicare allows. Medicare publishes a fee schedule that specifies the amounts it reimburses physicians. This Medicare physician fee schedule has led many states to adopt workers compensation medical fee schedules, very often making specific reference to the Medicare schedule.

The Medicare physician fee schedule dictates reimbursement amounts, for participating physicians, according to a very detailed itemization of medical procedures. This identification is the “Current Procedural Terminology” or CPT coding system. The CPT coding system is the intellectual property of the American Medical Association, which maintains and updates it. Thousands of specific medical procedures, from simple blood tests to the most complex surgeries, are assigned CPT codes. This coding scheme is the industry standard and is used by both Medicare and Group Health insurers.

Workers compensation fee schedules often also use the CPT codes. Unlike Medicare, state workers compensation medical fee schedules do not fix a price for a given CPT but instead specify a Maximum Allowable Reimbursement (MAR).

Medicare reimbursements are built from two components: the Conversion Factor (CF) and the Relative Value Unit (RVU). Medicare uses a single conversion factor for all CPT codes and it updates that factor annually. The purpose of the one conversion factor is to enable adjustments at overall expenditure levels and to facilitate updating the fee schedule for inflation. Essentially, the CF is a number that converts value units into current dollar amounts.

The more complicated component is the Relative Value Unit (RVU). The system for determining RVUs is the Medicare Resource-Based Relative Value Scale (RBRVS). The initial work on the RBRVS was done at Harvard beginning in 1985. The RBRVS was implemented in 1992 with the intent to achieve two basic goals [Miller]:

- Shift the basis for reimbursements from usual and customary charges to unit-less amounts that vary according to the resources required to provide the service.
- Shift resources away from “procedure driven medicine” and toward “cognitive medicine.”

Both goals were meant to contain costs. The first goal was to shift from what doctors are charging to what they should charge. The second goal reflected the belief that medical costs could be lowered if more resources were spent on preventive care and less on procedures to treat conditions only after they appear.

RVUs measure three kinds of resources:

- Work—time the physician spends with the patient
- Practice—office staff salaries, rent, etc.
- Malpractice insurance

The work component typically dominates for procedures done in a hospital, while the practice component is often the largest component for in-office procedures. Each of the three components is adjusted for differences in location according to the Geographic Practice Cost Index. Of the three components, malpractice is typically the smallest as well as the most variable by specialty and location. It is important to recognize that the RBRVS design and implementation process continues. For example, before 1999 and 2000, respectively, practice and malpractice RVUs were based on historical charges rather than resource-based values [Maxwell].

In less precise, but more revealing terms, the second goal was to shift reimbursements from specialty care to primary care. For example, a study comparing Medicare and private payer reimbursement in 1993 found that, overall, Medicare reimbursed at just over three-fourths of what private insurers paid [Miller]. For office visits, however, the figure was much higher, at over 90%. For diagnostic procedures it was much lower, at less than a half. Compared with other payers, Medicare generally reimburses primary care better than it reimburses specialty care. This is consistent with the second goal. The expected cost savings from that shift in resources was not realized, however. Medicare learned an important lesson in benefit utilization: medical providers are able to maintain income in the face of price cuts by increasing the number of procedures or shifting to more profitable ones [Codespote].

The 1990s saw reimbursements by Group Health insurers move closer to those of Medicare. One reason for this is the growing dominance of Medicare in the healthcare insurance market, and with that dominance the role of setting prices for the industry. In addition, Group Health insurers made greater application of managed care networks and negotiated fees. For example, when the RBRVS was introduced, private payers reimbursed diagnostic testing at 200% of the Medicare rate. This percentage dropped to about 160% by 1999 and declined still further, to under 140%, by 2004 [MPAC-3].

Many state workers compensation fee schedules make use of the Medicare RBRVS, and there is considerable variety in the ways they do this. Some states specify the MAR as a percentage of the Medicare rate. Others use the Medicare RVUs but apply their own conversion factors, often varying the CF by service type.

Most states that do not use the Medicare RBRVS base their MARs on usual and customary charges. A firm specializing in processing medical data is sometimes hired to build such a fee schedule or to update one. It is expensive to build the requisite fee databases to implement or update such fee schedules. Another concern is the possibility of legal challenges to basing reimbursements on usual and customary charges derived from insurance industry data.

When a state sets the MARs as a specified percentage of the Medicare reimbursement, that state's workers compensation fee schedule will be updated annually in synch with the Medicare physician fee schedule. Other states apply a wide variety of approaches to updating their workers compensation medical fee schedules. Some states that use the Medicare RVUs prefer to customize their schedules in various ways. Because Medicare is continually refining its Physician Fee Schedule, it is important for any state that bases its workers compensation fee schedules on the RBRVS to determine whether any adjustments are needed when the Centers for Medicare & Medicaid Services changes the way it determines its RVUs or the Medicare CF.

Medicare and Workers Compensation Fee Schedules: Comparisons

The Workers Compensation Research Institute (WCRI) produces a series of studies that express workers compensation fee schedule MARs as percentages of the corresponding Medicare rate. Chart 8 shows the median MAR ratios to Medicare by state from the 2006 WCRI study [Eccleston—2006]. Bars are color coded according to whether the state workers compensation medical fee schedule is based on the RBRVS. States with fee schedules based on RBRVS show less variability and a tendency toward lower percentages relative to Medicare than states that do not base their fee schedules on the RBRVS. For example, four of the five states with the lowest percentages to Medicare base their schedules on the RBRVS, while four of the five states with the largest percentages do not.

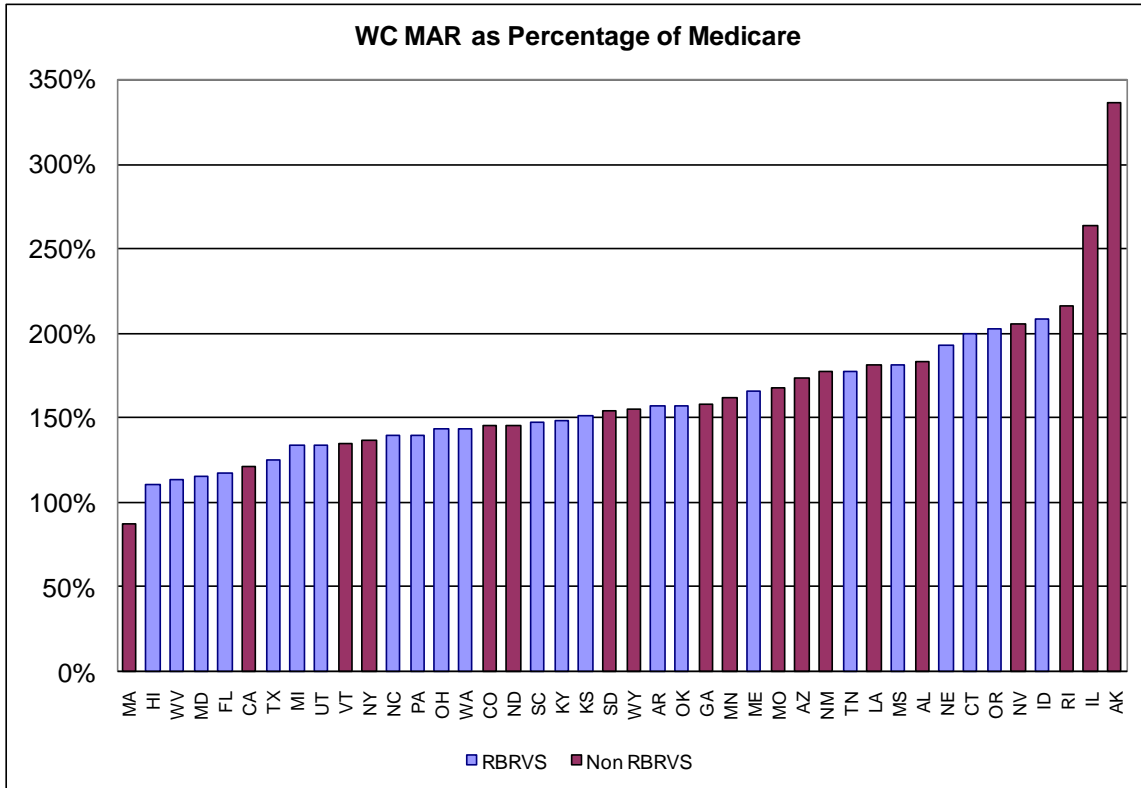


Chart 8: Workers compensation fee schedule MARs expressed as percentages of Medicare rates; state medians for the RBRVS states (in blue) show less variability, staying in the 110%–210% range [Eccleston—2006].

Most states that use the RBRVS either specify the MAR as a percentage of the Medicare rate or use the Medicare RVUs and replace the Medicare CF with state-customized values. Workers compensation fee schedules often differ from Medicare by having multiple CFs. One reason that states have multiple CFs is to counteract Medicare’s reimbursement of specialty care at a lower rate relative to market rates than Medicare’s reimbursement of primary care.

Chart 9 is based on the 2002 and 2006 WCRI studies relating workers compensation fee schedule MARs to Medicare rates. The bars measure the median relativities to Medicare by service category taken over the states with workers compensation fee schedules. The chart shows high relativities for specialty care like surgery and radiology. The relativities of 205% and 180% for 2006, respectively, are more in line with what was observed for the private payer to Medicare relativities of nearly two decades ago, when the RBRVS was first introduced. Regarding the reimbursement of specialty versus primary care, a key observation is that while private payer rates have grown closer to Medicare, workers compensation fee schedules and Medicare have moved further apart.

One reason for this is that many states update their CFs by an inflation factor. Constraints imposed on Medicare spending growth have produced Medicare rates that lag medical inflation. As a result, workers compensation fee schedules have increased relative to Medicare rates. Also, simply adjusting each CF by the same inflation factor maintains the same relativity of reimbursement between primary and specialty care, even though Group Health has moved its reimbursement relativities closer to Medicare's. The result is a number of MARs for workers compensation specialty care that are not only well above Medicare but are higher still when compared with Group Health reimbursements. In short, many workers compensation medical fee schedules have evolved along rather different lines than those that the Medicare Physician Fee Schedule has followed.

States that base their workers compensation fee schedules on the RBRVS sometimes need to consider the inner workings of the RBRVS when updating their fee schedules. The 2008–2009 Medicare update provides a specific case on point. The Medicare formula includes a “budget neutrality factor” whose application was changed beginning with 2009. The change had the effect of increasing the RVUs while decreasing the Medicare CF. States need to investigate whether this might have an unintended impact on their fee schedule. NCCI's analysis suggests that in some states simply updating CFs for inflation and not offsetting the RVU formula change will produce MARs that are about 8% higher than is likely to be intended.

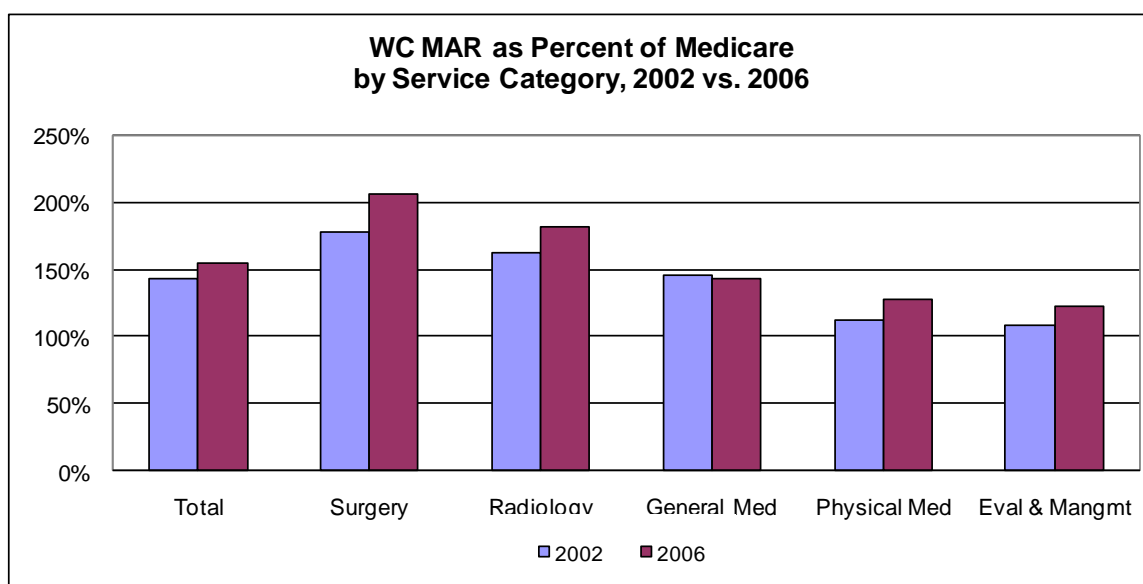


Chart 9: Relative to Medicare rates, the spread between primary and specialty care reimbursement has increased for workers compensation fee schedule MARs [Eccleston—2002, 2006].

Medicare and Workers Compensation Fee Schedules: Allocation to Primary and Specialty Care

Charts 10 and 11 provide state-level detail to illustrate how, as compared with the RBRVS, many workers compensation fee schedules reimburse specialty care at a higher level than they pay for primary care. The figures are again from the 2006 WCRI study [Eccleston—2006]. Chart 10 compares surgery (specialty care) with physical therapy (primary care). States that use the RBRVS are segregated to the right. Workers compensation fee schedule MARs for physical medicine mostly fall in the 100%–150% of Medicare range, while the percentages for surgery, especially among the non-RBRVS states, are often over 200%. The fact that the percentages are all over 100% simply means that the MARs consistently exceed Medicare rates. This is consistent with the workers compensation fee schedule MARs acting as maximums rather than as regulated fees. The left side of Chart 10 shows that, relative to Medicare reimbursement, all non-RBRVS state schedules allow higher MARs for surgery than for physical therapy. Because most of the non-RBRVS states base their MARs on usual and customary charges, this observation uses workers compensation experience to reaffirm that, compared with private payers, Medicare reimburses specialty care at comparatively lower rates than it reimburses primary care. The Centers for Medicare & Medicaid Services has found that the vast majority of Medicare patients have access to specialty care [MEDPAC-1, 2008, p.53], so it follows that that many workers compensation specialty care MARs are well above what is needed to assure access.

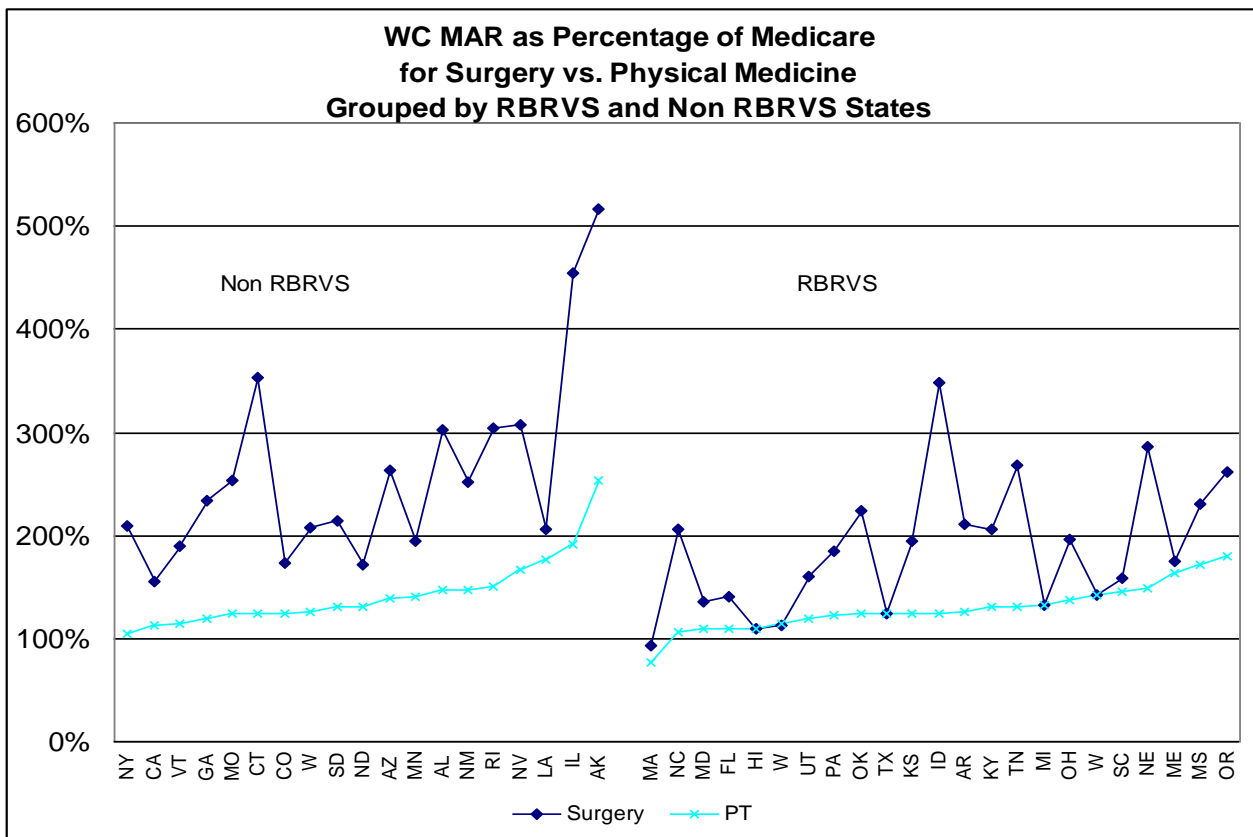


Chart 10: Relative to Medicare, workers compensation MARs for surgery are higher than for physical therapy, and especially so for non-RBRVS states [Eccleston—2006].

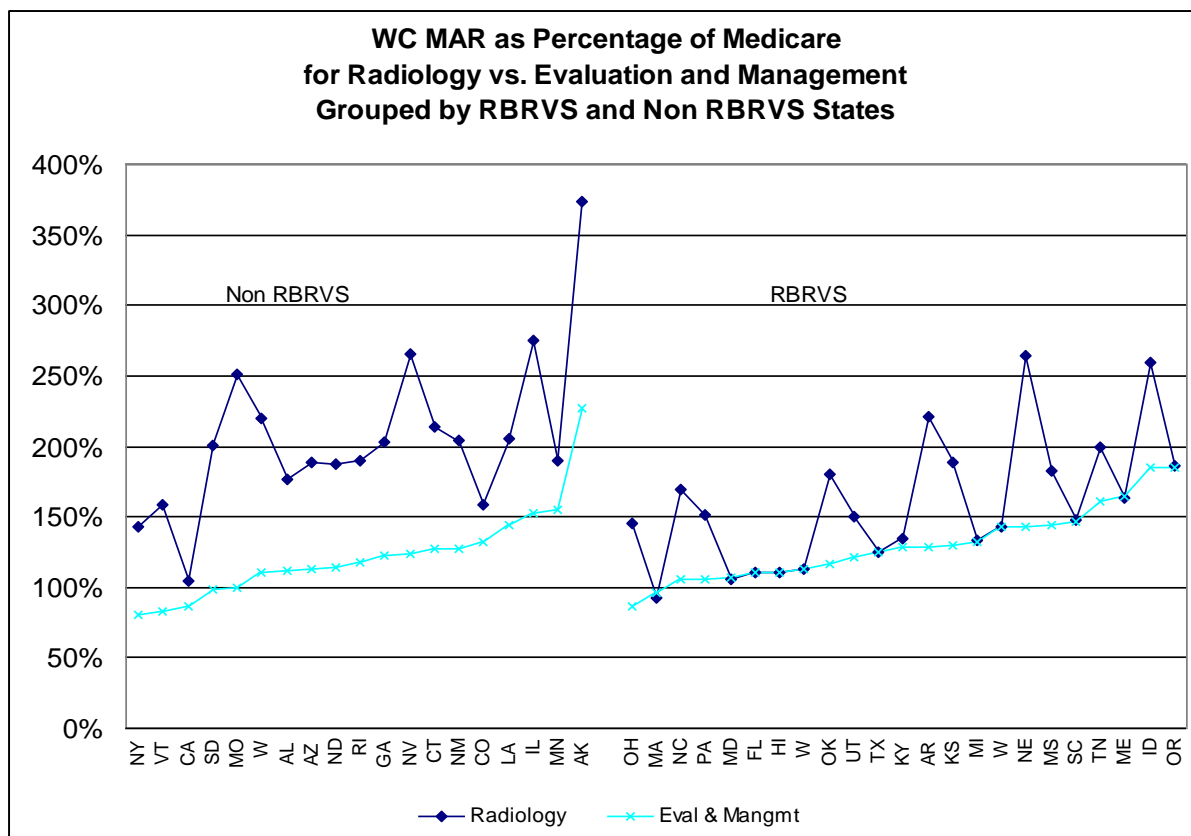


Chart 11: Relative to Medicare, workers compensation MARs for radiology are higher than for office visits, and especially so for non-RBRVS states [Eccleston—2006].

The RBRVS states show a similar pattern, but the surgery percentages are not as high. Many RBRVS states have the same percentage of Medicare for surgery and physical medicine. Those last states, in effect, adopt the Medicare RBRVS allocation, which shifted resources from specialty to primary care. Chart 11 reveals a pattern very similar to non-RBRVS states when radiology (specialty care) is compared with evaluation and management (primary care).

Medicare and Workers Compensation Fee Schedules: Cost Impact

Charts 8–11 compared amounts published in Medicare and workers compensation fee schedules. To get insight into the cost impact, we need to look at actual reimbursements. In this section, we look at four particular procedures: two that represent primary care and two from specialty medicine. For each procedure the Medicare and workers compensation fee schedule MARs are compared with median reimbursements in Group Health and workers compensation. We then take a closer look to see how fee schedules influence the distribution of reimbursements.

Overview of Cost Impact: Median Reimbursements for Primary Care

Chart 12 shows median reimbursements by state for the office visit CPT code 99213 (Office or other outpatient visit for the evaluation and management of an established patient). When complications arise in performing a medical procedure, they can result in very high reimbursement rates. Accordingly, the median reimbursement is shown rather than the mean, because it is less influenced by such outliers. States are ordered by increasing workers compensation MAR. Observe that Medicare sits below the other three rates, and at about \$45, shows little variation by state. The workers compensation reimbursement tracks very closely with the fee schedule MAR. The Group Health median mostly fluctuates between the Medicare and the workers compensation fee schedule rates.

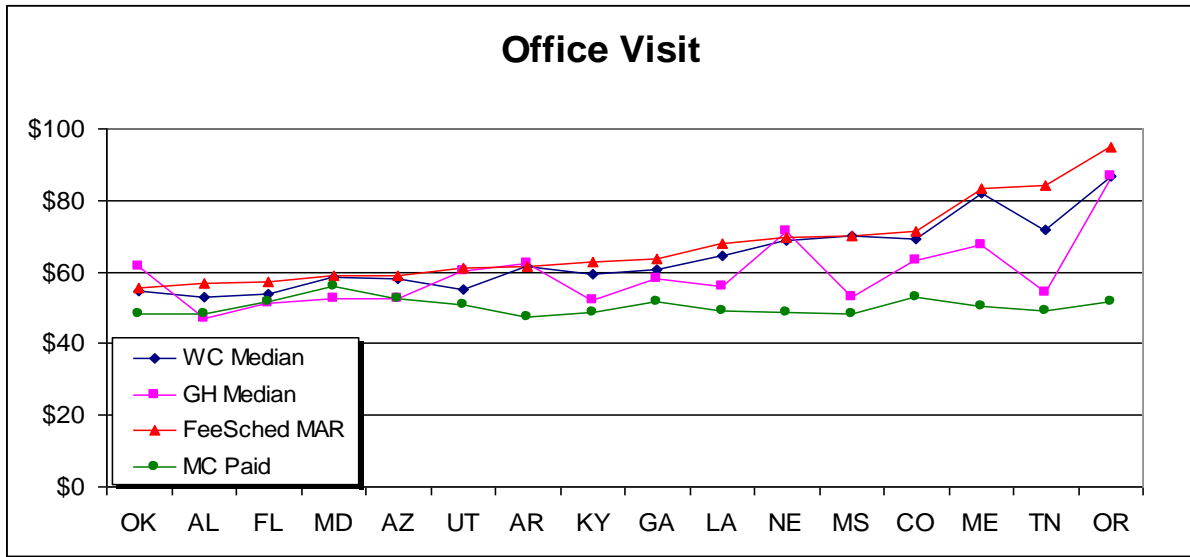


Chart 12: Median workers compensation reimbursement for office visits is near the MAR and often above the Group Health median.

Chart 13 shows median reimbursements by state for the most common workers compensation physical therapy procedure, CPT code 97110 (Therapeutic procedure, one or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility). Observe that Medicare again sits below the other three, and at about \$28, shows little variation by state. The workers compensation reimbursement tracks very closely with the fee schedule MAR. The Group Health median is more variable, fluctuating below but more often above the workers compensation fee schedule rates. Using Group Health to proxy the market, Chart 13 suggests that workers compensation fee schedules often limit physical medicine reimbursements to below market rates.

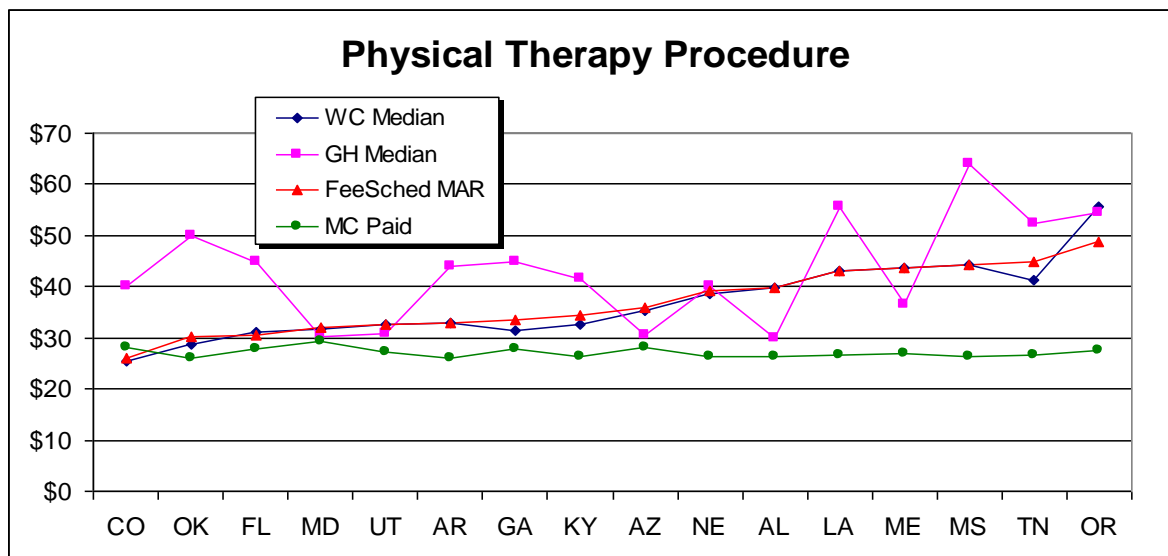


Chart 13: Median workers compensation reimbursement for physical therapy is near the MAR and often below the Group Health median.

Overview of Cost Impact: Median Reimbursements for Specialty Care

Chart 14 shows median reimbursements by state for carpal tunnel surgery, CPT code 64721 (Neuroplasty and/or transposition; median nerve at carpal tunnel), a considerably more expensive procedure. Observe that Medicare sits below the other three amounts, and at around \$400, shows little variation by state while the workers compensation MAR varies a lot, exceeding \$1,000 for two states. The workers compensation median reimbursement again tracks closely with the fee schedule MAR and is consistently above the Group Health median, as much as \$400 above for several states.

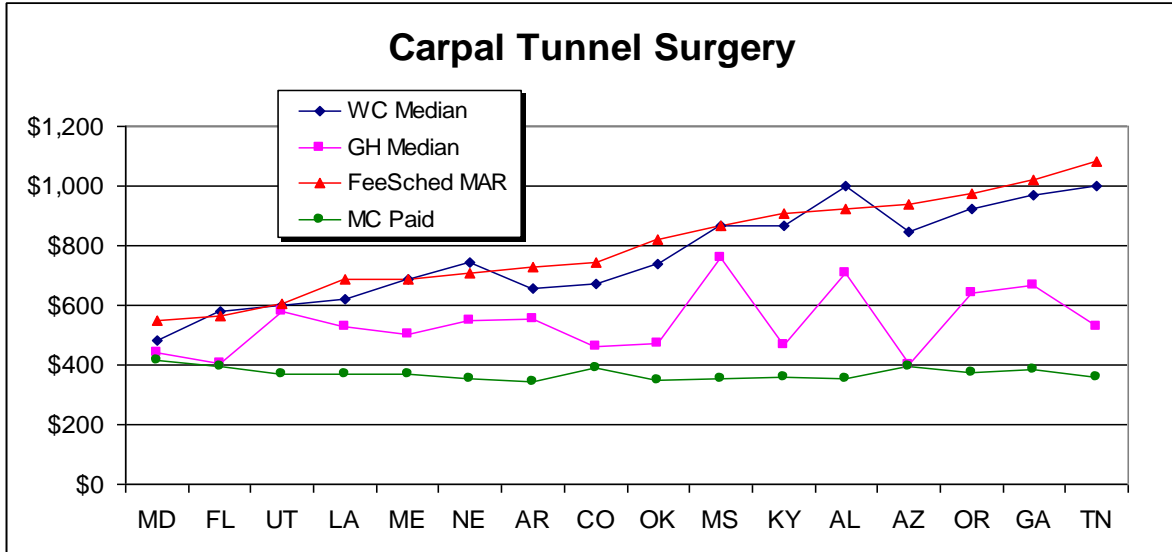


Chart 14: Median workers compensation reimbursement for carpal tunnel surgery is near the MAR and above the Group Health median.

Chart 15 shows median reimbursements by state for the shoulder X-ray CPT code 73030 (Radiologic examination, shoulder complete, minimum of two views), a less expensive example of specialty care, often reimbursed at a rate comparable to an office visit. As usual, Medicare sits below the other three, and at about \$30, shows little variation by state.

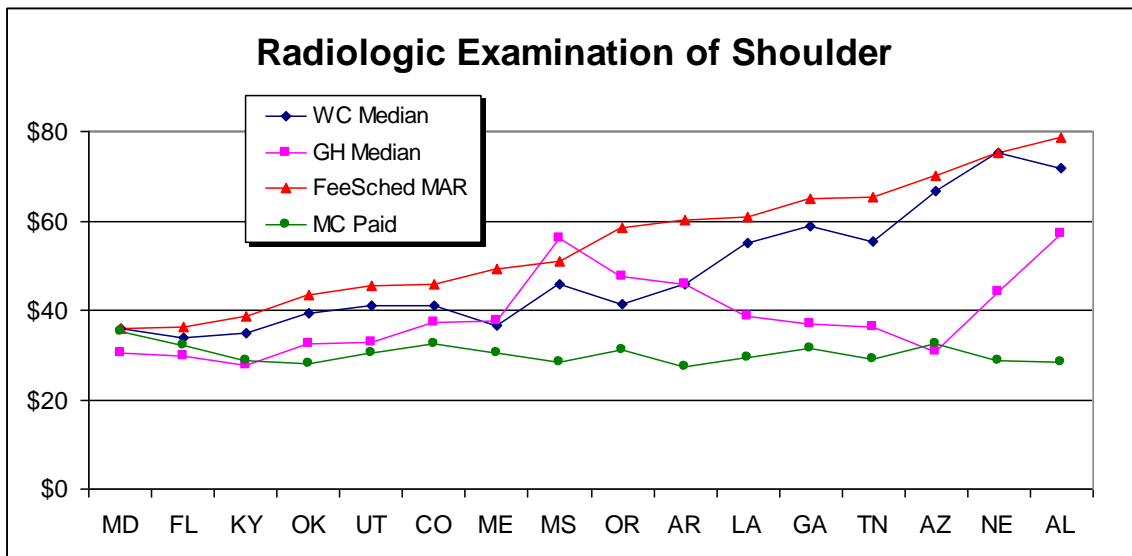


Chart 15: Median workers compensation reimbursement for shoulder X-ray is below the MAR and often above Group Health.

The workers compensation median reimbursement is below the fee schedule MAR but generally tracks with it. The fee schedule MAR varies considerably by state with its lowest equaling the Medicare rate and with its highest exceeding two and a half times Medicare. The Group Health median again tends to fluctuate between the Medicare and the workers compensation fee schedule rates and is considerably lower than workers compensation for the rightmost six states with the highest MARs.

Closer Look at Cost Impact: Distribution of Reimbursements for Primary Care

Charts 12–15 reinforce the observation that specialty care is often reimbursed at a higher rate in workers compensation than in Group Health. To better understand how workers compensation fee schedules impact reimbursement, it is instructive to look beyond the median and at the entire distribution of payments. In particular, this reveals how a MAR set above market rates can increase workers compensation medical costs.

For the same four procedures, Charts 16–19 graph the full distributions of workers compensation and Group Health reimbursements together with the Medicare rates. Payments have been converted to percentages of the state MAR so as to be able to pool together the data from many states into a more complete picture. The workers compensation and Group Health payment curves are based on many payments, while the workers compensation fee schedule curve is based on the one MAR for the state. Chart 16 is for office visit CPT code 99213.

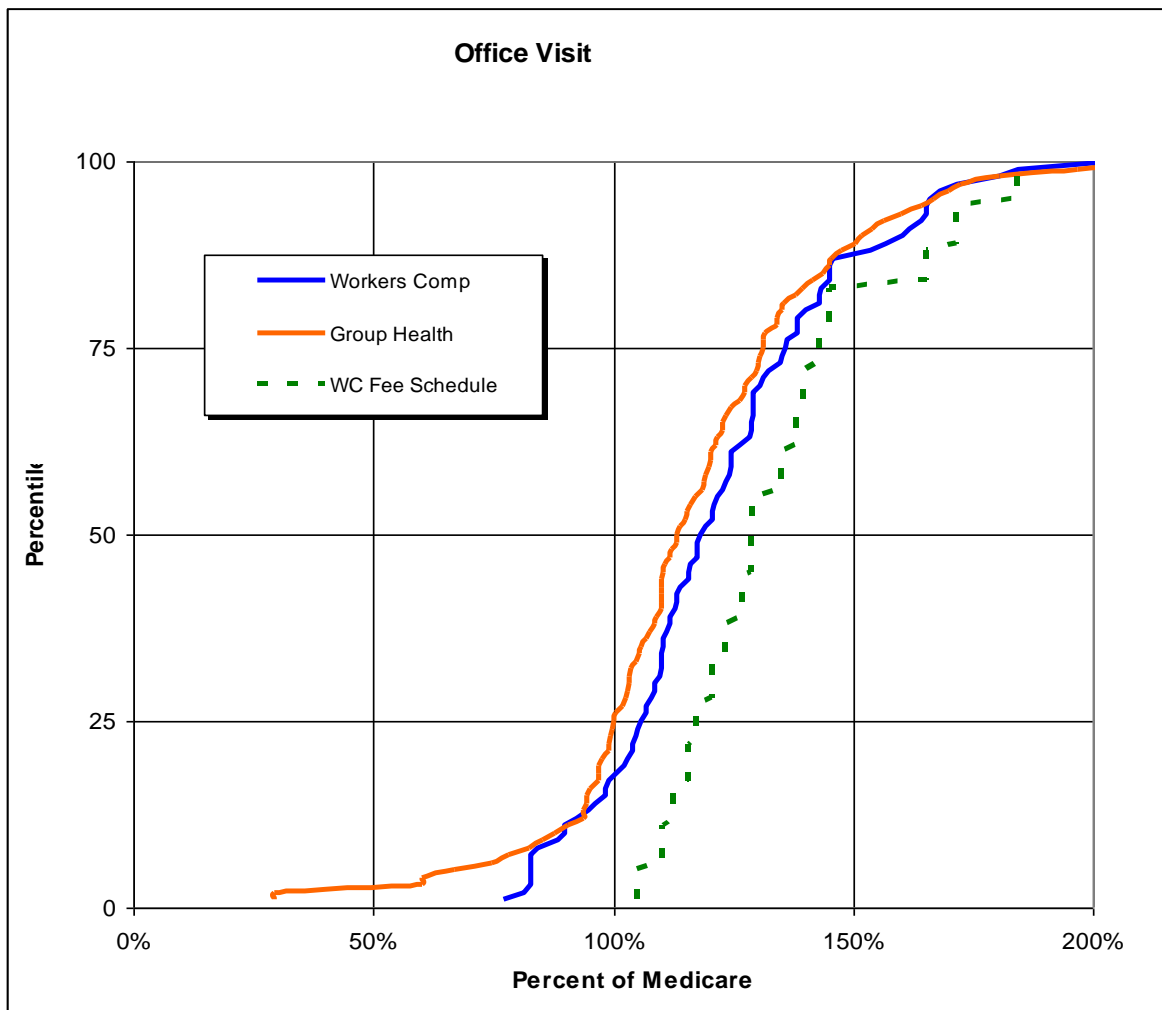


Chart 16: Case of an office visit shows workers compensation reimbursements near Group Health.

The workers compensation fee schedule MAR curve lies to the right of the vertical line at 100% of Medicare. This means that every state fee schedule sets the MAR for CPT code 99213 at an amount greater than what Medicare pays in that state. The Group Health curve crosses that same 100% vertical line at the 25th percentile along the vertical axis. This

means that one fourth of Group Health payments are made at or below the applicable Medicare reimbursement rate. Similarly, the Group Health curve crosses 150% of Medicare at the 90th percentile, meaning that only 1 in 10 Group Health payments exceed one and a half times the Medicare rate.

The most important observation from Chart 16 is that there is little separation between the workers compensation and Group Health curves. The graph suggests that the two insurance plans reimburse similar amounts for this office visit, with each showing more than half of their payments between 100% and 150% of Medicare. Only at the smallest percentiles are the workers compensation and Group Health curves separated. This is not unreasonable because under Group Health, more so than workers compensation, the presence of denials, downcoding, deductibles, copays, and accepting assignment can result in doctors being paid very small amounts after reimbursements are itemized into specific procedures.

The office visit example in Chart 16 illustrates the case when workers compensation reimburses at amounts comparable to the broader healthcare market, as measured by the Group Health experience. Chart 17 follows up on Chart 13 with experience for physical therapy procedure CPT code 97110, which is among the most common medical procedures paid by workers compensation insurers. Chart 17 represents graphically that some workers compensation fee schedules manage to bring workers compensation reimbursement rates below market, as evidenced by much of the workers compensation curve lying to the left of the Group Health curve. Indeed, for the middle half of payments (the horizontal strip between the 25th and 75th percentiles) the workers compensation curve clings near the MAR, keeping it to the left of the Group Health curve. It is important to observe that the fee schedule MAR for CPT code 97110 is based on a single (up to 15 minute) application of therapy, while the workers compensation and Group Health billings for CPT code 97110 often reflect multiple applications. Multiple applications are concentrated in the top quartile, and that explains why the workers compensation and Group Health curves are to the right of the MAR curve above the 75th percentile.

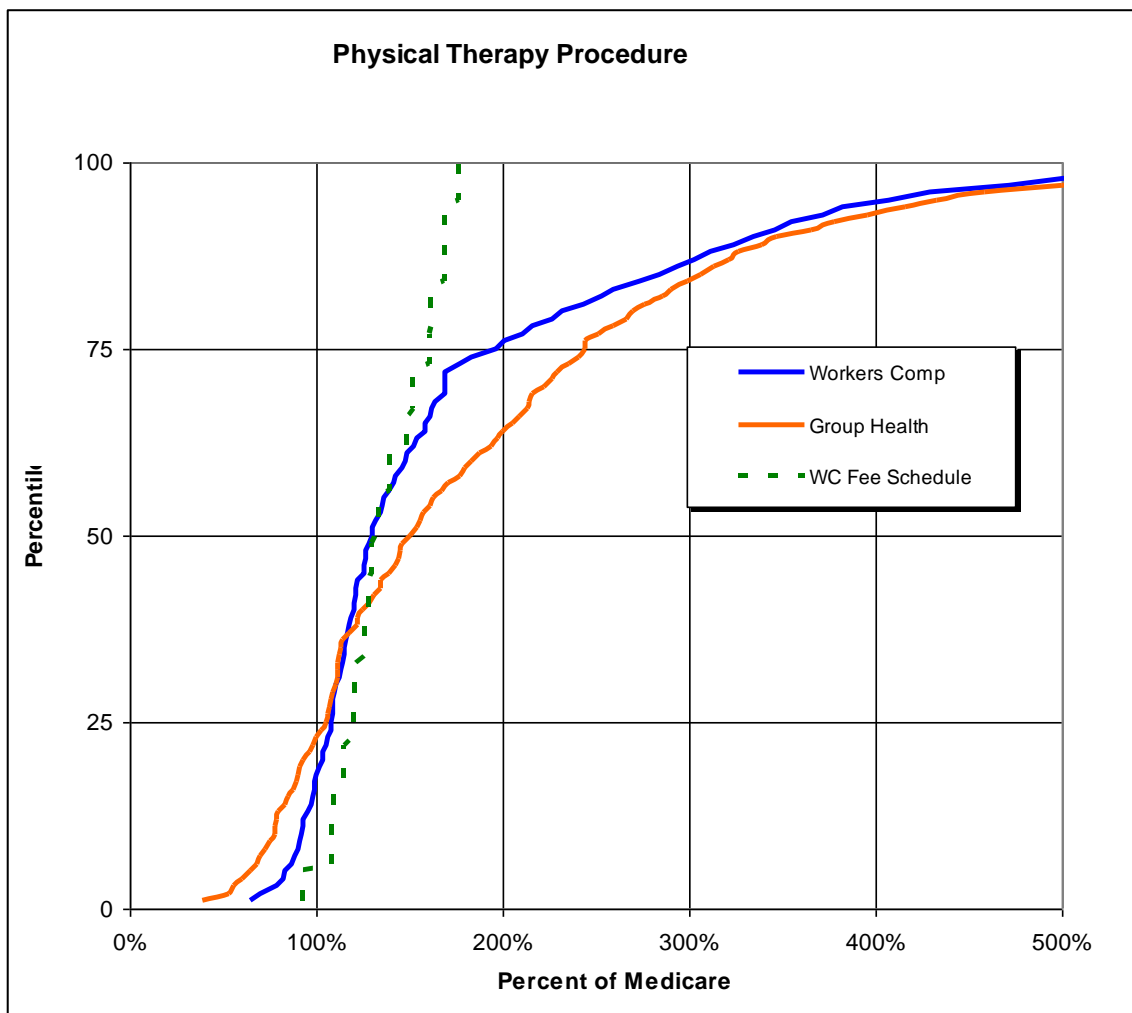


Chart 17: Case of a physical therapy procedure with workers compensation reimbursements near or below Group Health.

Closer Look at Cost Impact: Distribution of Reimbursements for Specialty Care

Office visits and physical therapy are two important examples of primary care and Charts 16 and 17 show that, in general, workers compensation fee schedules operate to contain their workers compensation reimbursement rates. Charts 18 and 19 are examples of specialty care for which workers compensation fee schedules are not as effective. Chart 18 follows up Chart 14 on carpal tunnel surgery, a comparatively high-priced specialty procedure. Chart 19 follows up Chart 15 on shoulder X-rays, another specialty procedure but one whose price is much lower. Note that the MAR did not exceed twice the Medicare rate for the office visit and physical therapy codes in Charts 16 and 17, respectively. By contrast, the MAR curves in Charts 18 and 19 indicate that the MAR for these two specialized procedures exceeds twice the Medicare rate. The most apparent and important observation is that the workers compensation curve is consistently well to the right of the Group Health curve in both Charts 18 and 19. This means that workers compensation fee schedules are failing to hold reimbursements down to near market rates. We conclude that, unlike the two primary care examples, workers compensation fee schedules are not effective at containing prices for these two specialty procedures.

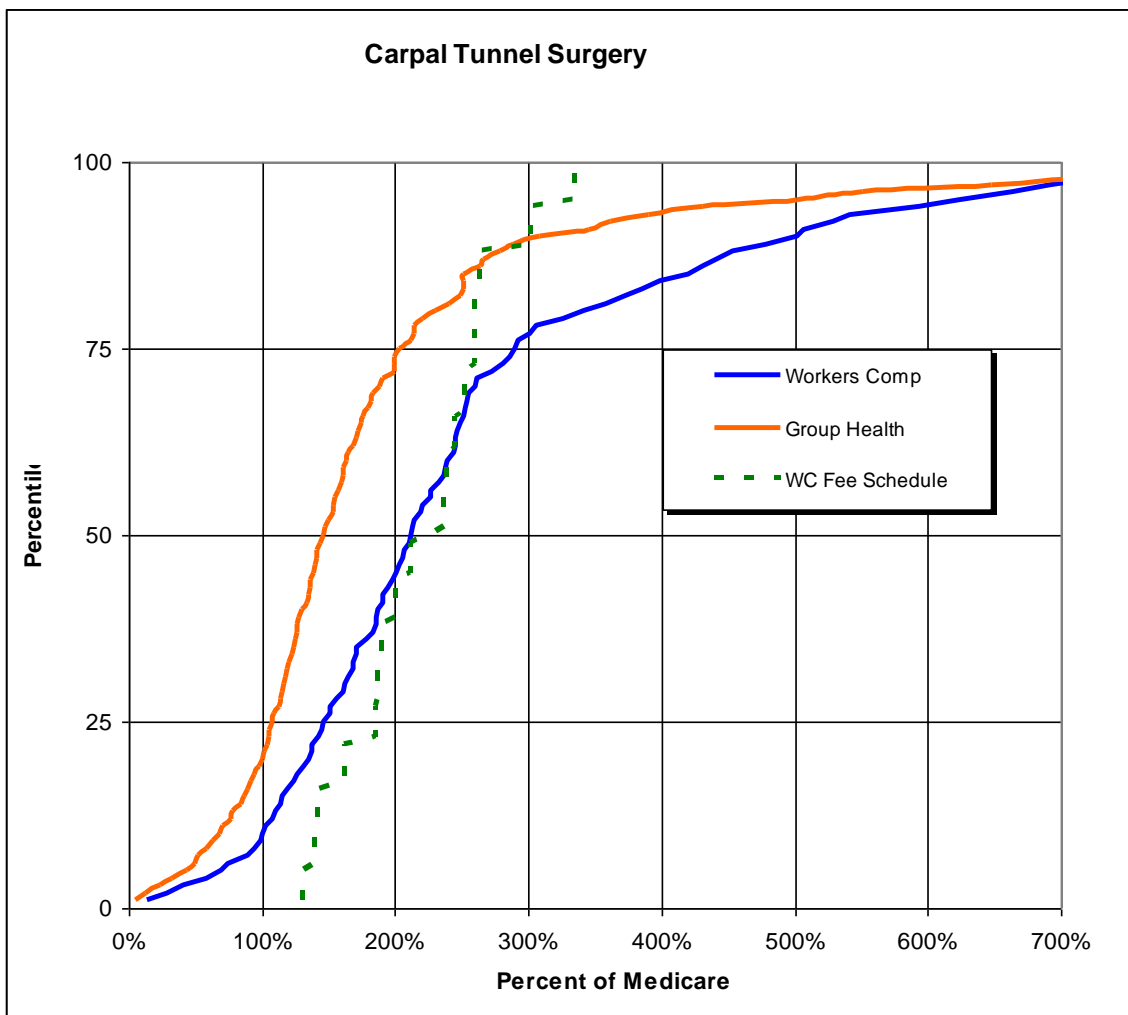


Chart 18: Case of carpal tunnel surgery shows workers compensation reimbursements above Group Health.

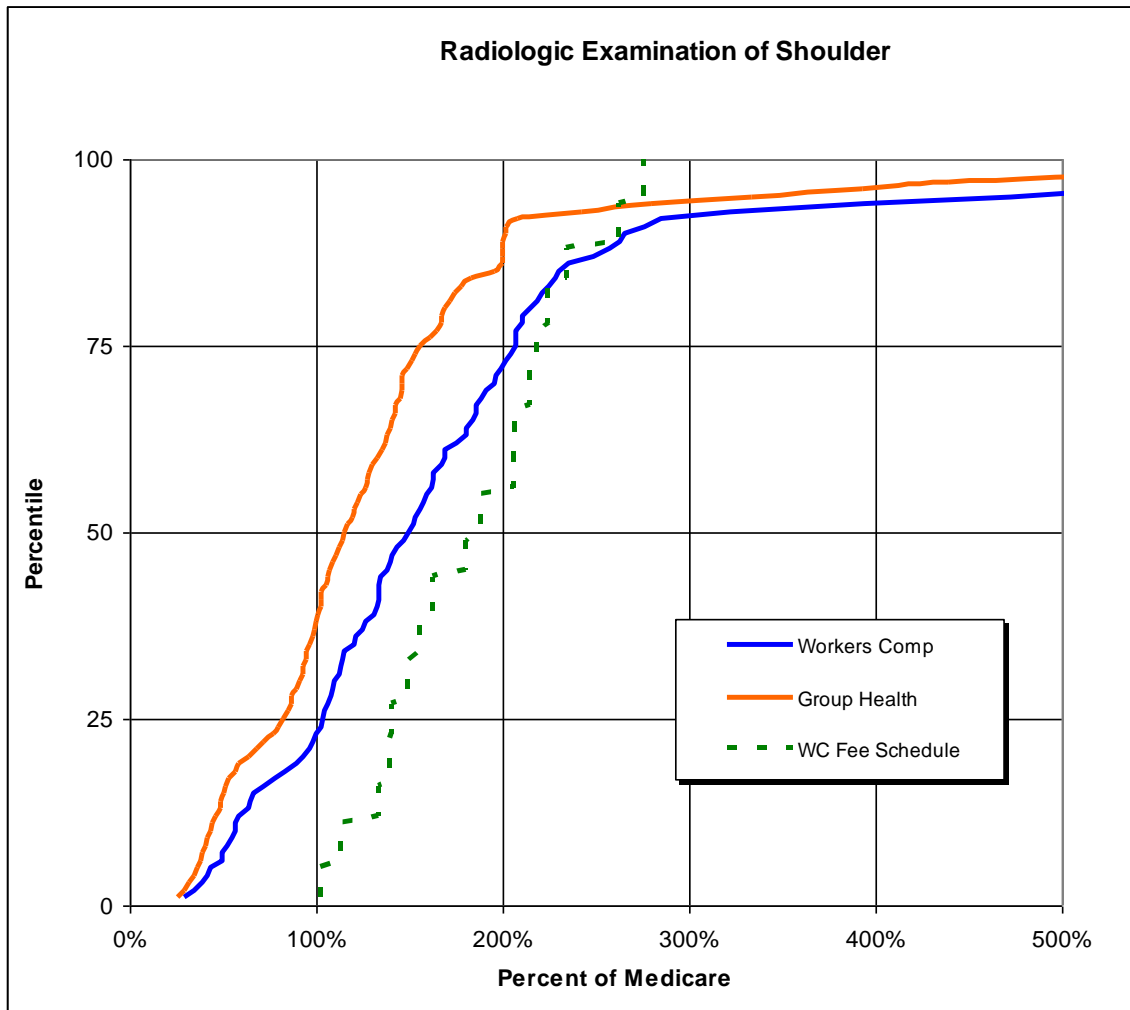


Chart 19: Case of shoulder X-rays shows workers compensation reimbursements above Group Health.

Still Closer Look: Reimbursements for Shoulder X-ray by State

Charts 16–19 highlight some general observations on the impact of workers compensation fee schedules on primary and specialty care. However, that impact varies among the many states and manifold procedures, and there are many different but repetitive patterns. It is instructive to pursue the shoulder X-ray a step further and drill down to the case of a particular procedure in a particular state.⁵ In this case, reimbursements can be expressed directly in dollars, and graphs are easier to interpret.

⁵ This discussion focuses on one medical procedure to illustrate one particular point. The recent NCCI technical paper *Effectiveness of WC Fee Schedules: A Closer Look* (2009) provides many more illustrations of the variety of payment distributions that arise with workers compensation medical fee schedules.

Chart 20 looks at CPT code 73030 for Maryland during 2006. The two vertical dashed lines reflect the fact that there is one Medicare amount and one workers compensation fee schedule amount, both near \$35. The graph shows that while the workers compensation payments are very concentrated at that MAR, Group Health payments are also concentrated but at a somewhat lower rate. While the concentration of workers compensation payments at the MAR does shift the workers compensation payments to the right, the two payment distributions remain very similar in this case. Both show about 15% of payments exceeding the MAR and both have small humps near \$70 (around twice the MAR and Medicare rates), suggesting payments for two applications of the procedure in some billings. This pattern is typical of the case when the Medicare and MAR are near each other, as that essentially squeezes most payments together.

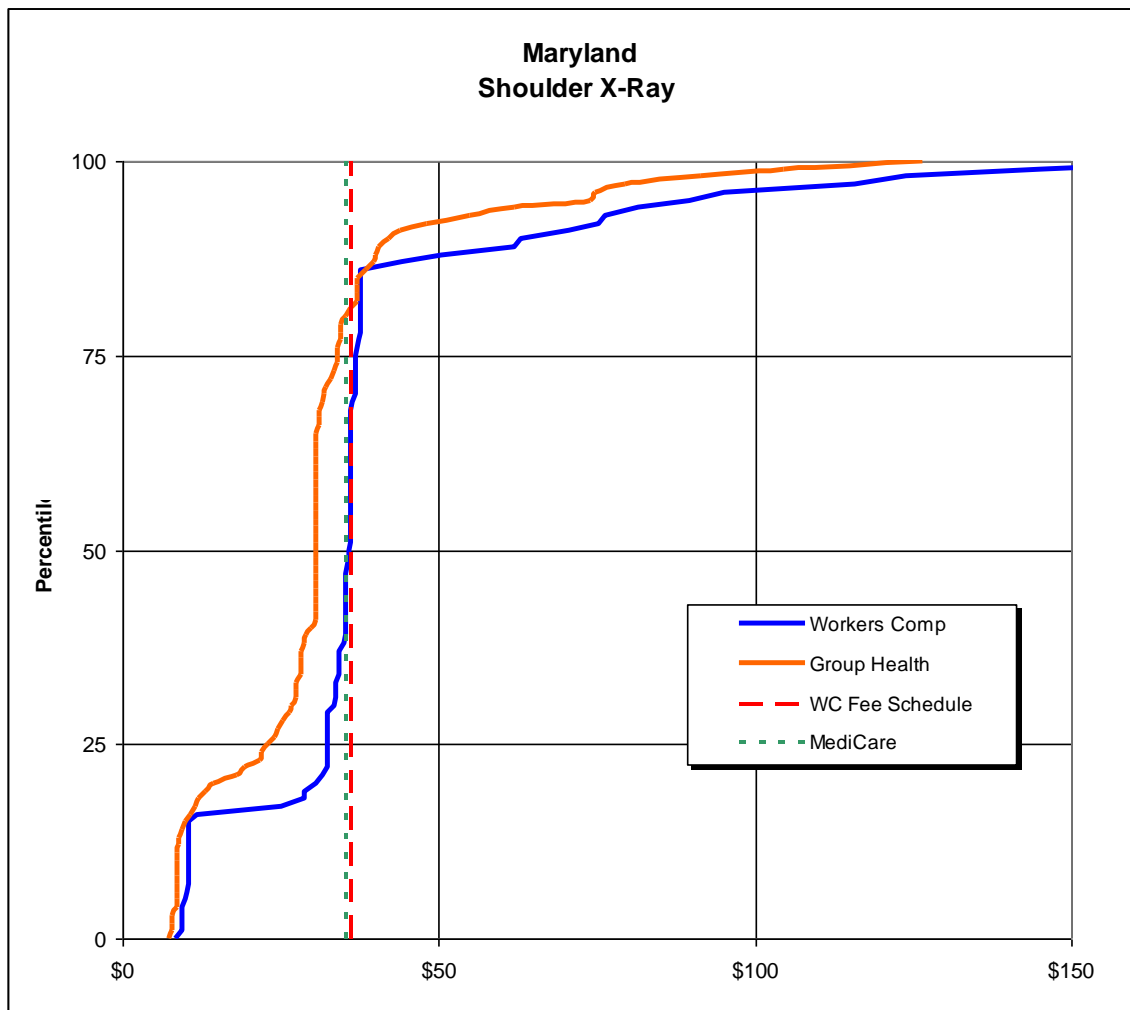


Chart 20: MAR near Medicare for shoulder X-rays in Maryland keeps workers compensation reimbursements near Group Health.

Chart 21 provides an instructive contrast. Again the procedure is CPT code 73030 but now for Nebraska whose \$75 MAR is more than double the Medicare rate of about \$30. In this case, Group Health payments are concentrated in between, mostly near \$50. Here there is considerable difference between the workers compensation and Group Health curves, with the workers compensation curve being markedly to the right. The graph shows how the concentration of workers compensation payments near the MAR has the effect of pulling a large portion of workers compensation payments higher than Group Health, and thereby increasing workers compensation costs. The pattern is typical of the case when the MAR is considerably higher than the Medicare rate with the result that workers compensation prices are drawn above market. This is an example—albeit a very specifically targeted example—of unintended consequences. The workers compensation medical fee schedule, intended as a cost containment device, leads in this scenario to higher workers compensation medical costs. Such examples, however, take on added significance when considered in combination with what has been observed regarding higher price differentials for specialty care in many workers compensation medical fee schedules.

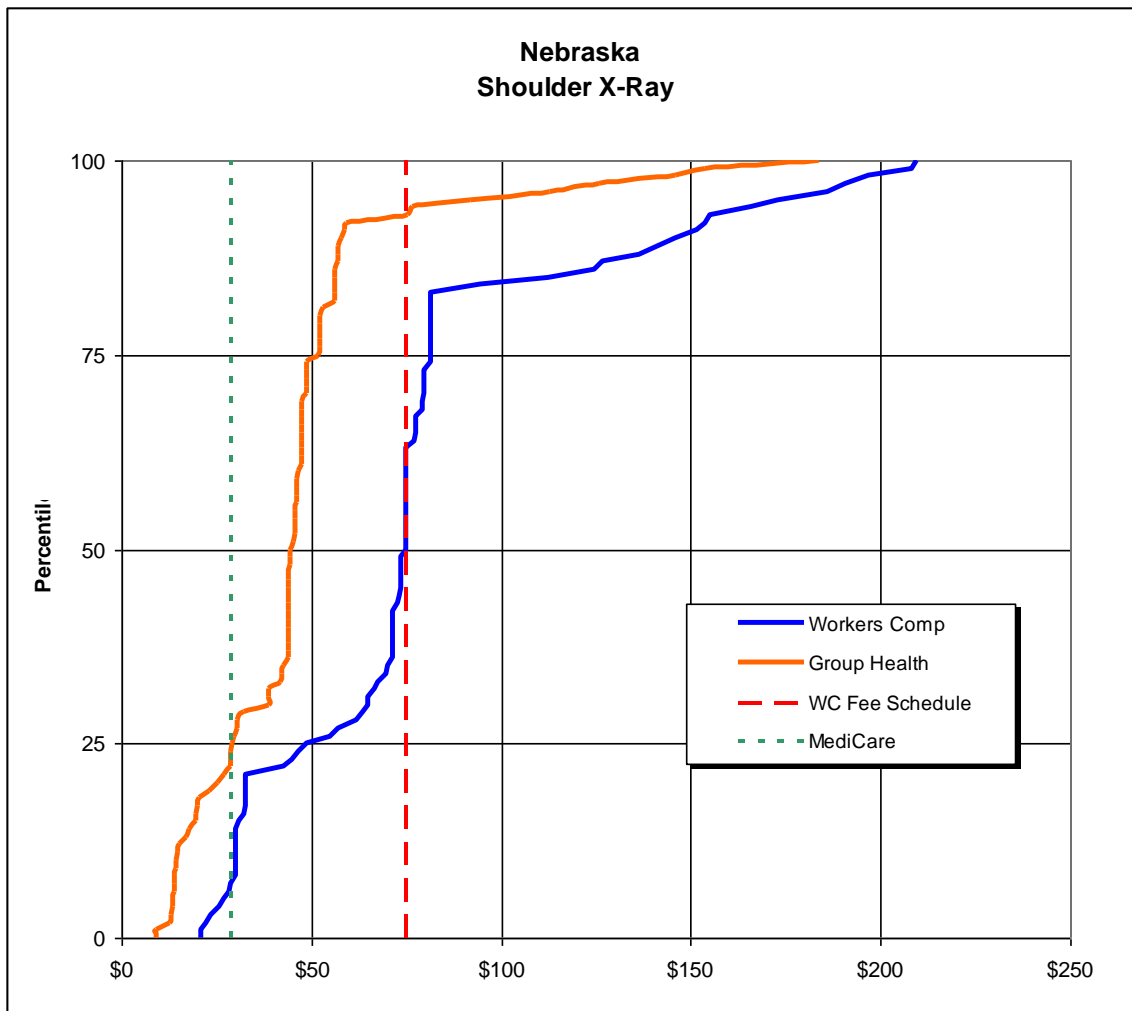


Chart 21: High MAR for shoulder X-rays in Nebraska increases workers compensation medical costs.

Chart 21 for Nebraska shoulder X-ray reimbursements provides an illustration of how workers compensation fee schedules can drive up reimbursements when the MAR is set too far above Medicare. While this example is very specific, Charts 22 and 23 for Alabama and Arizona, respectively, show that this is part of a larger pattern of how workers compensation fee schedules sometimes fail not just to contain workers compensation medical costs but can act to drive them upward.

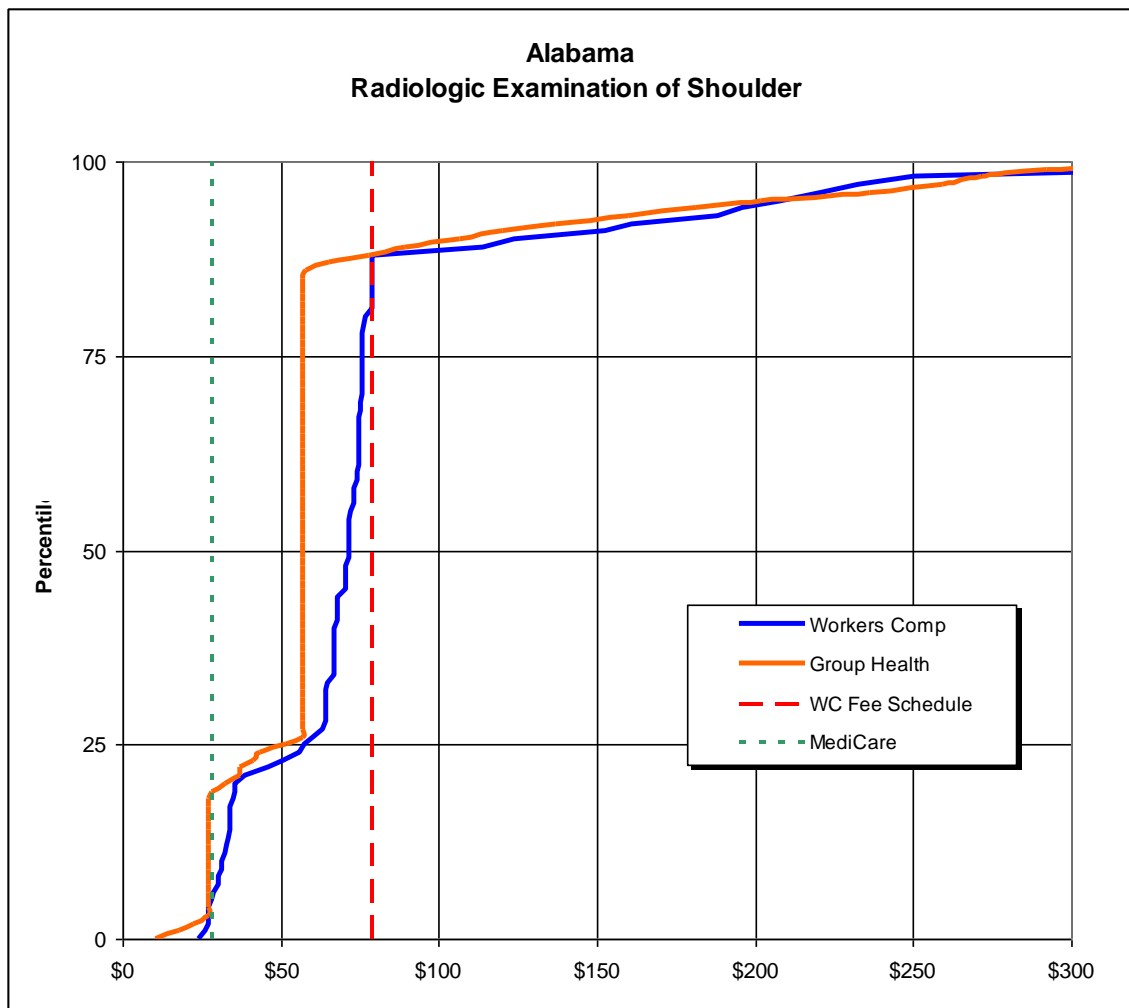


Chart 22: High MAR for shoulder X-rays in Alabama increases workers compensation medical costs.

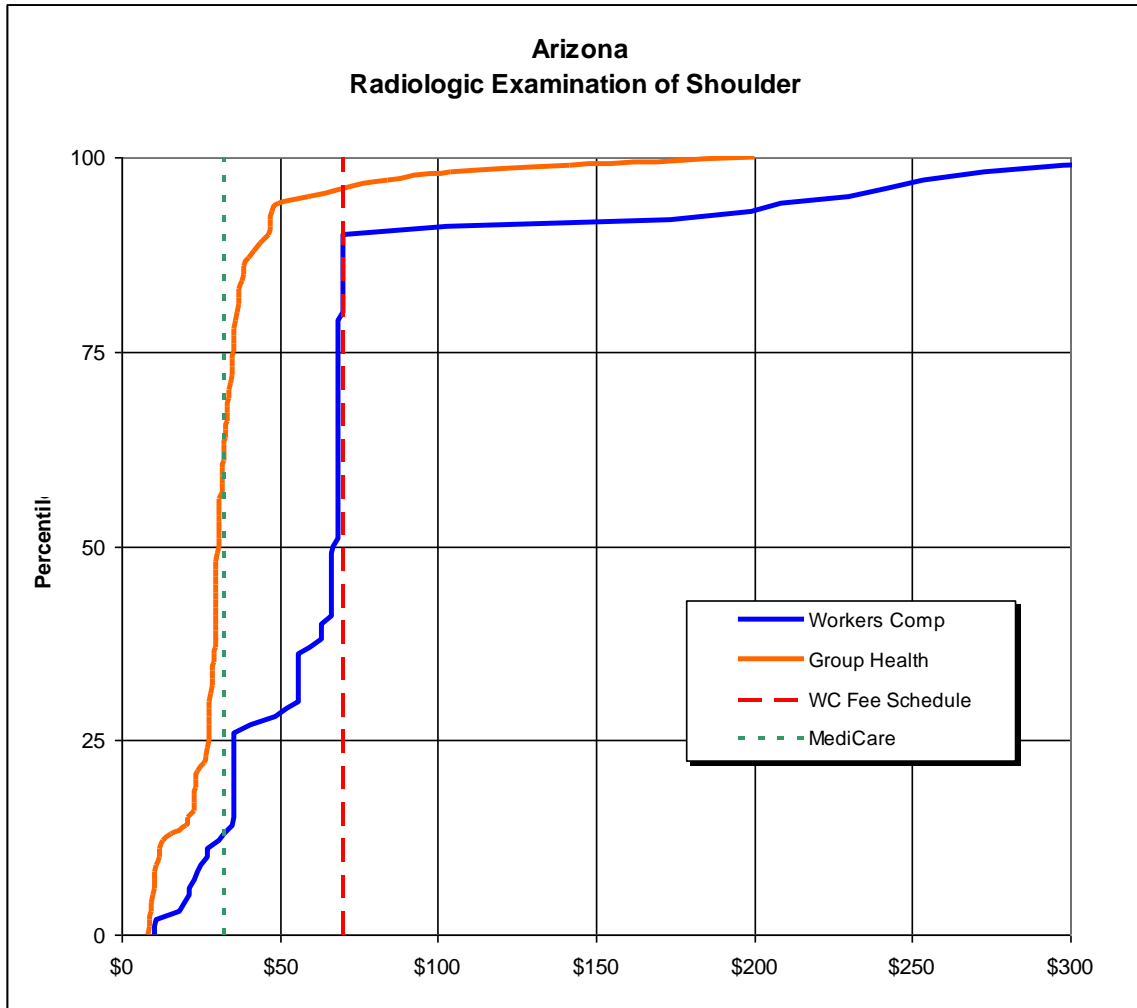


Chart 23: High MAR for shoulder X-rays in Arizona increases workers compensation medical costs.

Medicare and Workers Compensation Fee Schedules: Beyond the RBRVS

Chart 24 shows that in recent years the percentage of workers compensation medical reimbursement that falls subject to physician fee schedules has been steadily declining. In a sense, workers compensation physician fee schedules are victims of their own success—as other costs grow faster their share decreases. Other important trends contribute to this decline and threaten to render the traditional workers compensation medical fee schedule less effective as a cost containment device. One such trend is a shift away from private practice fees subject to fee schedules and toward drugs and hospital care that is less likely to be subject to a medical fee schedule. Physicians are making greater use of hospitalists. Procedures performed by a hospitalist are increasingly being billed through the hospital or other facility that employs them and, as such, may not fall under a workers compensation physician fee schedule. This suggests that workers compensation fee schedules might need to be expanded to cover hospital charges to a greater degree than they do now. Medicare has introduced its Diagnosis-Related Groups (DRG) system as a prospective payment approach to reimburse for inpatient care. A minority of state workers compensation systems currently apply DRG-based tables to limit reimbursement.

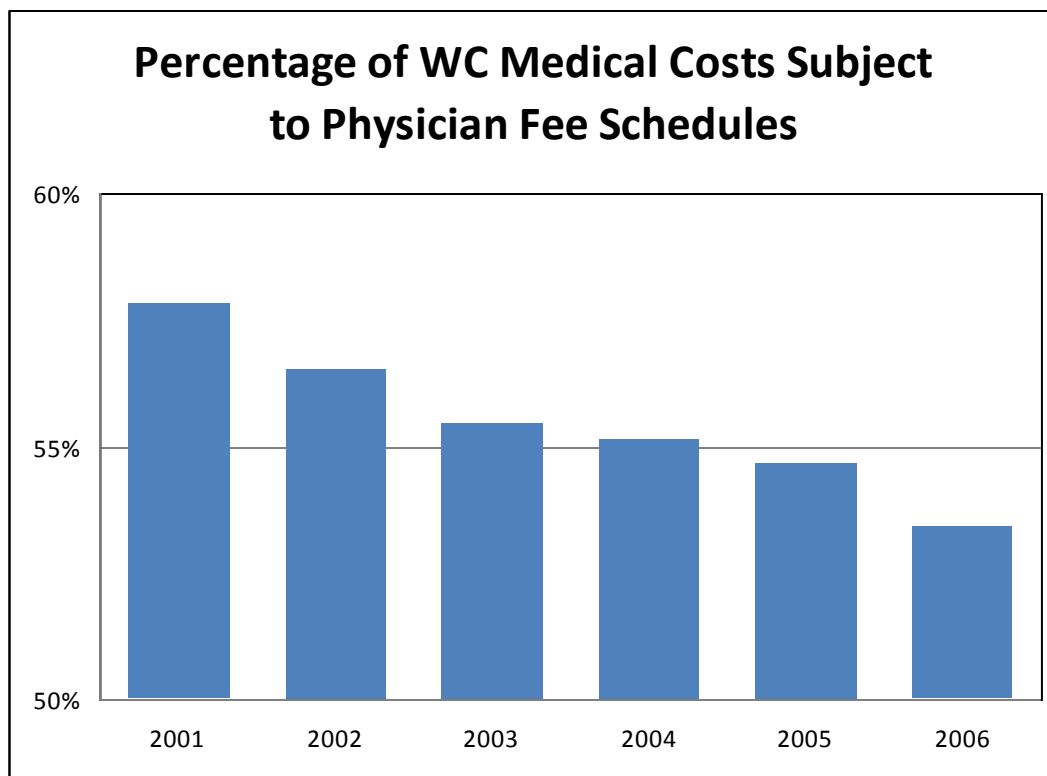


Chart 24: The proportion of workers compensation medical expenditures covered by a workers compensation physician fee schedule has declined [NCCI data].

A similar case can be made for outpatient care done by a facility, such as an ambulatory surgical center. Such facilities are being used more often for procedures of relevance to workers compensation, such as arthroscopic knee surgery or carpal tunnel surgery. Medicare introduced its ambulatory payment classification (APC) system as a prospective payment approach to reimburse this sort of ambulatory care. Only a very few state workers compensation systems, to date, apply APC-based tables to limit reimbursement.

APCs and DRGs are akin to treatment protocols, since they effectively limit the volume of reimbursable services on a particular injury. The difference in the patient population between Medicare and workers compensation is an important consideration. At least as important is the greater emphasis that workers compensation places on return to function. Workers compensation might develop its own APC and DRG formulas, at least for the most common workers compensation diagnoses. The Medicare formulation can still provide much useful assistance in doing this.

With the introduction of Medicare Part D, it may be viable to use Medicare reimbursement as a basis for regulating workers compensation drug costs. Many state workers compensation systems refer to the Average Wholesale Price (AWP) in setting fees for medication prescribed to workers compensation claimants. There are issues with the use of the AWP, however, and plans aligned with those of Medicare Part D might provide preferable alternatives for workers compensation coverage. This

suggests another potential way that Medicare can help workers compensation contain medical costs.

The Workers Compensation Medicare Set Aside (WC MSA) is a particularly direct connection between Medicare’s cost containment efforts and workers compensation. The WC MSA is of particular concern when the workers compensation insurer and claimant have reached a settlement prior to the worker attaining age 65 and where the need for additional medical care may arise after the claimant becomes eligible for Medicare. In this regard, we already suggested that workers compensation insurers devote resources to avoid fractures, especially from slips or falls. The same applies to getting a good handle on the treatments and costs for the types of injuries and medical complications that seniors are prone to suffer. The use of APCs and DRGs may prove especially useful in assessing, and perhaps even limiting, such liability.

Closing Remarks

We conclude this discussion as we began it, with a look at the fiscal challenges confronting Medicare. Medicare has attempted to deal with these problems in several ways. The current approach is the Sustainable Growth Rate (SGR) model, which calls for annual adjustments in Medicare reimbursement rates to target Medicare expenditures to a percentage of GDP over a projected time window. Chart 25 illustrates the SGR approach. The line graph shows cumulative annual update factors to the Medicare physician fee schedule, while the paired bars show the corresponding historical and the Medicare Payment Advisory Commission’s projected spending amounts. The chart compares projected spending with and without the SGR cuts. The key point is how the “without SGR cut” bars diverge upward from the “with SGR cut” bars over the projected period.

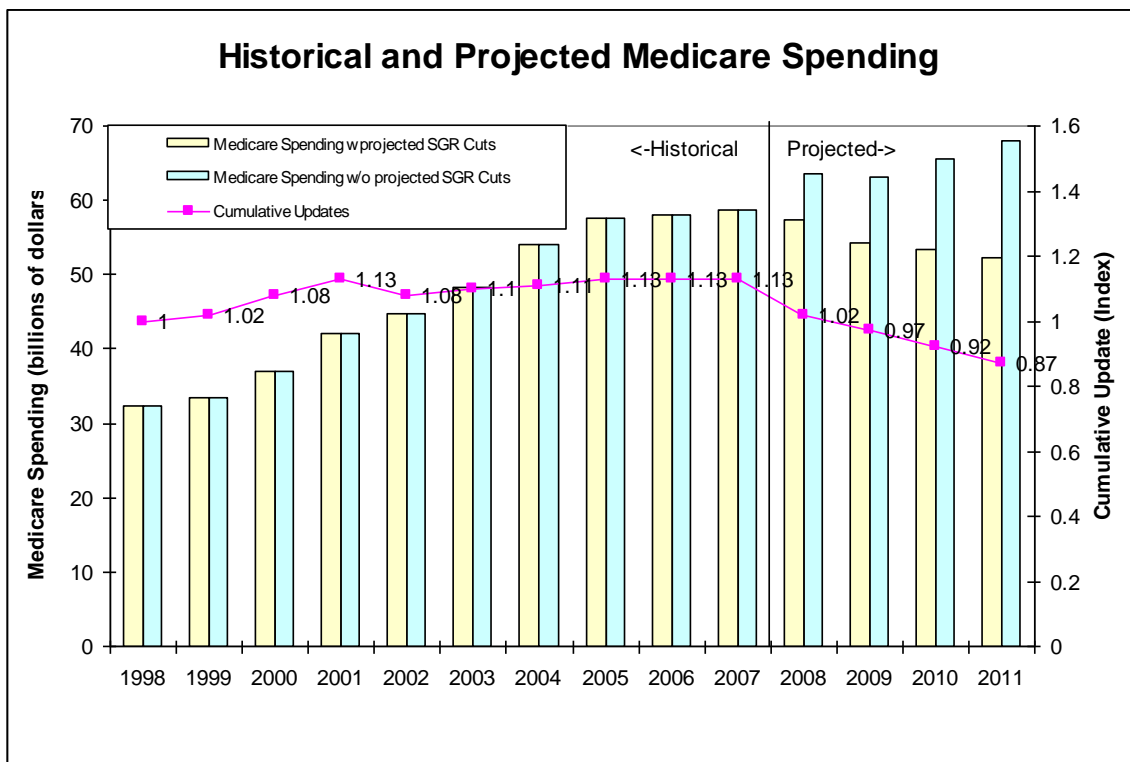


Chart 25: Prospect for Medicare spending over the next few years is very dependent upon political events [MPAC June 2008 Data Book: Healthcare Spending and the Medicare Program, Chart 1–6, p. 8].

Any change in Medicare reimbursement that exceeds certain tolerances must be approved by Congress. For 2008 and 2009, the first two years of the projected period in Chart 25, the SGR indicated rate reductions that were effectively rejected by Congress.

In addition to implementation problems, experts have noted serious conceptual flaws in the SGR formula [MPAC-2, 2008 p. 82, 2009 p. 86 ff.]. It is well understood that while medical price inflation is increasing medical expenditures more than other parts of the economy, utilization is the main challenge to medical cost containment [Maxwell, Miller]. This observation

applies to both Medicare and workers compensation. The SGR formula responds to an increase in utilization by lowering prices, so as to keep the total dollars of reimbursement under a certain time-varying ceiling. But as Codespote et al. observe [Codespote]:

In a normally functioning competitive market, a decline in the prices that purchasers are willing to pay for a given service can be expected to result in a decrease in the quantity of such services that suppliers would be willing to furnish, and thus a decline in overall expenditures on these services. The reaction to reductions in Medicare physician fees has generally not followed this pattern. Rather, reduced fees are likely to be met by a combination of an increase in volume and a shift in the mix or intensity of services furnished to Medicare beneficiaries.

The figures in Chart 25 do not fully reflect the recent downward movement in GDP. That downturn has prompted revised estimates showing Medicare becoming insolvent much sooner than previously projected. Attempting to get back on the SGR track would demand even greater reductions in reimbursement amounts than those already rejected by Congress. For example, comparing the cumulative updates for 2007 and 2011 on Chart 25 indicates a 23% cut in rates;⁶ however, the 2008 Congress deemed a cut of less than half that magnitude to be politically unviable.

However successful Medicare, or the federal government, is in its efforts to contain medical costs, that experience will provide the opportunity to inform the workers compensation medical cost containment effort. Since the National Commission on State Workmen's Compensation Laws in the early 1970s, workers compensation benefit reform has looked to the individual states to serve as test beds for experimentation. This study emphasizes the common ground between Medicare and workers compensation and might serve as a useful reminder that a countrywide perspective could also help guide workers compensation efforts at medical cost containment and benefit reform.

⁶ $0.87/1.13 = 0.77 = 1 - 0.23$

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