



Reimbursement Rates Literature Review

Trends of Medicare Reimbursement Rates

Short summary:

Reimbursement rates for 26 common plastic surgery procedures from 2010-2020 were found to decrease by -1.5% average relative value units; Medicare reimbursements rates have not kept pace with inflation, leading to a decrease in reimbursements relative to cost of living.

Longer summary:

Siotos et al, (2021) examined the Physician Fee Schedule of the Centers of Medicaid and Medicare Services' reimbursement rates for 26 common plastic surgery procedures from 2010-2020. Descriptive statistics were used. Researchers found an “average relative [monetary unit] difference” increase of +2.02% After adjusting for inflation there was a 14.3% decrease, and when adjusted, equating to a -1.5% decrease in “value units” during the study time period. The authors concluded that Medicare reimbursements rates have changed over time, but not at the pace of inflation, leading to a relative decrease in reimbursements.

Siotos C, Cheah M, Damoulakis GMS, Kelly J, Siotou K, Schechter L, Shenaq D, Derman G, Dorafshar A. Trends of Medicare reimbursement rates for common plastic surgery procedures. *Plast Reconstr Surg*. 2021;147(5):1220-1225. DOI:10.1097/PRS.00000000000007878

National and geographic trends in Medicare reimbursement rates

Short Summary:

Smith et al., (2021) compiled Medicare reimbursement data for CPT (common procedural terminology) codes from 2000 to 2020. Average reimbursement changes per year (adjusting for inflation) were found to decrease by 29.3% for shoulder-related reimbursements and decrease by 24.5% for elbow-related reimbursements, with rates varying by rates state and geographically.

Longer Summary:

Smith and colleagues studied national and geographic trends in Medicare reimbursement rates for orthopedic shoulder and upper extremity surgery from 2000 to 2020. They determined the ten most common CPT (common procedural terminology) codes for these conditions and then compiled Medicare reimbursement data for these codes during the aforementioned time period. Percentage and average reimbursement changes per year were calculated. “Data from 2000,

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2010, and 2020 were organized by state.” Inflation-adjusted data were used for each CPT code to calculate “total percent change in physician fee and percent change per year.” Results: Shoulder reimbursement decreased by 29.3% and elbow reimbursement decreased by 24.5% from 2000-2020 when rates were adjusted for inflation. These rates varied by state and geographic region; the percentages given here are averages.

Smith JF, Moore ML, Pollock JR, Haglin JM, LeBlanc MP, Deckey DG, Arthur JR, Chhabra A. National and geographic trends in Medicare reimbursement rates for orthopedic shoulder and upper extremity surgery from 2000 to 2020. *J Shoulder Elbow Surg.* 2021; S1058-2746(21)00707-2. DOI: 10.1016/j.jse.2021.09.001

Integrating Acupuncture into Primary Care

Short summary:

Zahm (2021) found that insurance “*reimbursement remains a challenge,*” ranging from “34% to 69% of each bill paid for acupuncture at a rural Oregon clinic called Winding Waters Community Health Center (WWCHC). This researcher found that “*clinic revenue for acupuncture services exceeded costs by 4%.*” Acupuncture patients at this clinic found services to be “economically feasible and well utilized,” paying an average \$48.71 per visit. Medical providers at the clinic described reimbursement as “not cost-prohibitive and provides a nonpharmacologic treatment option” in rural Oregon.

Longer Summary:

Objectives: Researchers who performed this study set out to determine whether the integration of acupuncture into a rural Oregon “Patient-Centered Primary Care Home (PCPCH) and Federally Qualified Healthcare Center (FQHC).” The study (1) assessed demographics, clinical characteristics, and utilization patterns of [acupuncture] patients ... at Winding Waters Community Health Center (WWCHC)” and (2) do a “cost-benefit analysis.”

Design: Observational: “retrospective chart review” and “cost revenue assessment.”

Results: 551 WWCHC acupuncture patients’ charts over 3,210 visits; ages 18+/- years old; during January 2017 - December 2018. Average patient age was 54 years old. “99 patients (18%) reported income below the federal poverty level.” The most common health concern, or reason for being treated with acupuncture, was “back and neck pain (46.6% of visits).” The WWCHC clinic health care providers “placed 538 internal referrals for patients to receive acupuncture.” Patients at this medical center use insurance benefits for acupuncture, but “reimbursement remains a challenge,” ranging from “34% to 69% paid of each bill. At the WWCHC in 2018,

over an average of 779 clinic acupuncture visits, patients paid an average \$48.71 per acupuncture visit. Researchers found that “clinic revenue for acupuncture services exceeded costs by 4%.”

Conclusions: Researchers found that patients used acupuncture services at WWCHC, and found them to be “economically feasible and well utilized.” Clinic health care providers revealed that insurance “*reimbursement remains a challenge.*” Despite only a 4% revenue over costs, medical providers at the clinic described reimbursement as “not cost-prohibitive and provides a nonpharmacologic treatment option” in rural Oregon.

Zahm A. Integrating Acupuncture into Primary Care. *J Altern Complement Med.* 2021;27(5):384-389. DOI: 10.1089/acm.2020.0094

A scoping review of acupuncture insurance coverage in the United States

Short Summary:

A literature review performed by Bleck et al., 2021, revealed that “*licensed acupuncturists were less likely to be reimbursed [by insurance] and were reimbursed at lower rates compared to physicians.*”

A literature review performed by Bleck et al., 2021, revealed “*a lack of published data on acupuncture coverage in 44 states.*” The greatest lack of data was found in the Midwest and Southern United States. When researchers were able to locate coverage data, “*a large proportion of acupuncture users did not have insurance coverage.*” Although researchers in this study found that there was motivation to cover acupuncture, there was still a paucity of coverage. Insurance companies stated barriers of not enough providers, not knowing when to offer nonpharmacologic treatments, and wanted more evidence of the clinical efficacy and cost-effectiveness of acupuncture.

Longer Summary:

There is a great deal of motivation within the medical community to find safe and effective non-pharmacologic, non-opioid pain management options. However, patients without insurance may not be able to access these options. The authors performed a literature review and discovered “*a lack of published data on acupuncture coverage in 44 states.*” Much insurance coverage data is “not in the public domain.” The greatest lack of data was found in the Midwest and Southern United States. When researchers were able to locate coverage data, “*a large proportion of acupuncture users did not have insurance coverage.*” Although researchers in this study found that there was motivation to cover acupuncture, there was still a paucity of coverage. Notably, “*licensed acupuncturists were less likely to be reimbursed and were reimbursed at lower rates compared to physicians.*” Insurance companies stated barriers of not enough

providers, not knowing when to offer nonpharmacologic treatments, and wanted more evidence of the clinical efficacy and cost-effectiveness of acupuncture.

Bleck R, Marquez E, Gold MA, Westhoff CL. A scoping review of acupuncture insurance coverage in the United States. *Acupunct Med.* 2021; 39(5):461-470. DOI: 10.1177/0964528420964214.

Medicaid reimbursement for common spine procedures: Are compensation rates consistent?

Short Summary:

Casper et al., (2019) found Medicaid (MCD) reimbursements to be lower (78.4%) of the Medicare (MCR) reimbursements for common spine procedures.

Longer Summary:

Casper et al., (2019) found Medicaid (MCD) reimbursements to be lower (78.4%) of the Medicare (MCR) reimbursements. MCD reimbursement variation among states was statistically significant, ranging from 38.8% to 140% of MCR. The lowest MCD:MCR reimbursement rates (less than 50%) were found in New York, New Jersey, Florida, and Rhode Island. MCD reimbursement rates of 75% MCR were found in 20 states, and 100% MCR were found in 42 states. Variation in reimbursement was found for the same procedures.

Casper DS, Schroeder GD, McKenzie J, Zmistowski B, Vatson J, Mangan J, Stull J, Kurd M, Rihn JA, Anderson DG, Kaye DI, Radcliff K, Woods B, Hilibrand AS, Vaccaro AR, Kepler CK. Medicaid reimbursement for common spine procedures: Are compensation rates consistent? *Spine.* 2019;44(22):1585-1590. DOI:10.1097/BRS.0000000000003241

Comparison of Primary Care Physician Reimbursement Rates in the United States

Short Summary:

Riley and colleagues (2017) found lowest insurance reimbursement rates (adjusted for cost of living) for physicians in the District of Columbia, New York, Vermont, Connecticut, and Hawai'i. The highest rates (adjusted for cost of living) were found for Nebraska, Kansas, Indiana, Mississippi, and Michigan. Researchers expressed concern about the difficulty in getting enough doctors to meet patients' critical needs and suggested that increasing pay for "services in areas of unmet need" could be a way to increase access to care.

Longer Summary:

Riley and colleagues (2017) set out to determine if anecdotal evidence of physician reimbursement rates in Hawai'i are actually lower than other places in the country. Using FAIR

Health and Medicare, researchers collected 2016 insurance reimbursement rate data for the standard office visit CPT code 99213, and used www.numbeo.com for cost of living estimates. Reimbursement rates were compared between cities with “similar and disparate cost of living to Hawai’i.” Researchers found lowest reimbursement rates (adjusted for cost of living) for physicians in the District of Columbia, New York, Vermont, Connecticut, and Hawai’i. The highest rates (adjusted for cost of living) were found for Nebraska, Kansas, Indiana, Mississippi, and Michigan. Researchers found that “Providers [in Hawai’i] are reimbursed significantly lower than cities with similar cost of living by both Medicare and private insurances.” For example, “The range of payment for a 99213 visit by private insurance in 2012 according to the FAIR Health dataset was between \$76 to \$199, with Hawai’i physicians receiving \$100 a visit on average.” Compare these amounts to Medicare reimbursement for the same CPT code, a range of \$60.96 to \$93.91, with reimbursement to Hawai’i physicians \$77.86. Researchers noted the reimbursement variation in various areas around the U.S. Lower, similar, and higher cost-of-living cities compared to Honolulu had higher insurance reimbursement rates. Riley and colleagues (2017) expressed concern about the difficulty in getting enough doctors to meet patients’ critical needs, and suggested that increasing pay for “services in areas of unmet need” could be a way to increase access to care, especially given that Hawai’i is one of the most expensive. They also suggested that the Medicare Geographic Price Cost Indices should be balanced according to the same formula - increase reimbursement rates for services in areas of medical need. They recommended that the 10% Medicare Bonus Program could be an incentive to physicians as well.

Riley N, With K, Rogers K, DuBose-Morris R, Kurozawa T. Comparison of Primary Care Physician Reimbursement Rates in the United States. *Hawaii J Med Public Health*. 2017;76(3):supplement 1.

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