

Hospital Charges and Reimbursement for Drugs:

2019 Update Analysis of Markups Relative to Acquisition Cost

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Hospital Charges and Reimbursement for Drugs: Analysis of Markups Relative to Acquisition Cost

Analyses of prescription drug spending trends may not always include the role various parts of the pharmaceutical supply chain play in those trends. We estimate, based on publicly available data, how much hospitals paid, on average, to acquire a drug from its manufacturer. We then calculate the amount by which hospital charges and commercial insurers' payment to hospitals for those drugs exceeded their acquisition cost. The tables that follow analyze hospital mark-ups and margins by site of service for 20 individual drugs for commercial payers.

Table One: Analysis of Hospital Charge Information

Drug ¹	Estimated Hospital Charge per Claim ²	Estimated Hospital Acquisition Cost per Claim (ASP) ³	Margin: Difference Between Estimated Charge and Acquisition Cost	Hospital Charges as a Percentage of Acquisition Cost	Total Ratio: Hospital Charge/ Cost Weighted by PMPM Amount ⁴
Drug A	\$121,842	\$32,475	\$89,368	375%	4.78
Drug B	\$83,844	\$21,586	\$62,258	388%	
Drug C	\$76,645	\$17,337	\$59,309	442%	
Drug D	\$39,602	\$8,157	\$31,445	485%	
Drug E	\$61,440	\$6,214	\$55,226	989%	
Drug F	\$21,681	\$5,874	\$15,807	369%	
Drug G	\$26,093	\$5,592	\$20,501	467%	
Drug H	\$31,539	\$5,443	\$26,096	579%	
Drug I	\$51,242	\$5,080	\$46,162	1009%	
Drug J	\$18,138	\$4,350	\$13,788	417%	
Drug K	\$17,830	\$4,322	\$13,508	413%	
Drug L	\$18,517	\$4,290	\$14,227	432%	
Drug M	\$17,504	\$3,894	\$13,610	450%	
Drug N	\$15,398	\$3,685	\$11,713	418%	
Drug O	\$15,001	\$3,494	\$11,507	429%	
Drug P	\$9,753	\$3,485	\$6,268	280%	
Drug Q	\$14,197	\$2,498	\$11,700	568%	
Drug R	\$13,114	\$2,390	\$10,724	549%	
Drug S	\$6,963	\$2,295	\$4,668	303%	
Drug T	\$12,030	\$2,061	\$9,969	584%	

As shown in **Table One**, on average hospitals charge 478 percent of their acquisition cost for these 20 drugs, though the percentage varies materially from product to product. These charges exclude fees charged for administering the drug. While we are not aware of common reimbursement contracts between payers and hospitals that are denoted in terms of 100 percent of billed charges, hospital outpatient departments are often reimbursed based on a percentage of charges and hospital charges do influence patient payments, particularly for the uninsured.⁵

¹ The following drugs are reflected in the analysis and were included in both 2015 and 2017 analyses: Alimta, Eylea, Gammagard Liquid, Gamunex-C/Gammaked, Neulasta, Orenicia, Perjeta, Privigen, Remicade and Soliris. The remaining 10 products new to 2017 are: Avastin, Entyvio, Factor VIII (Recombinant), Herceptin, Keytruda, Opdivo, Rituxan, Stelara, Tysabri and Yervoy.

² The Magellan Rx Management Medical Pharmacy Trend Report™: 2018 Ninth Edition. Available at: <https://www1.magellanrx.com/magellanrx/publications/medical-pharmacy-trend-report.aspx> (Accessed May 14, 2019)

³ We estimated that the hospital's acquisition cost is equal to the manufacturer's average sales price (ASP) made available through the Centers for Medicare & Medicaid Services. As described in the text, this is likely a conservative estimate. ASP data obtained from the October 2017 ASP Pricing File. Available at: <https://www.cms.gov/apps/ama/license.asp?file=/Medicare/Medicare-Fee-for-Service-Part-B-Drugs/McrPartBDrugAvgSalesPrice/Downloads/2017-October-ASP-Pricing-File.zip> (Accessed May 14, 2019)

⁴ Per member per month (PMPM) amount obtained from the Magellan Rx Management Medical Pharmacy Trend Report™: 2018 Ninth Edition.

⁵ Michael Batty and Benedic Ippolito. "Mystery of The Chargemaster: Examining the Role of Hospital List Prices in What Patients Actually Pay." Health Affairs 36, no.4 (2017): 689-696.

Table Two: Comparison of Commercial Reimbursement with Average Sales Price (ASP)

Drug	Hospital Outpatient Commercial Reimbursement per Claim	Estimated Hospital Acquisition Cost per Claim (ASP)	Margin: Difference Between Commercial Reimbursement and Acquisition Cost	Hospital Reimbursement as a Percentage of Acquisition Cost	Total Ratio: Hospital Reimbursement/Cost Weighted by PMPM Amount
Drug A	\$57,524	\$32,475	\$25,049	177%	2.40
Drug B	\$44,101	\$21,586	\$22,515	204%	
Drug C	\$31,385	\$17,337	\$14,048	181%	
Drug D	\$16,496	\$8,157	\$8,339	202%	
Drug E	\$44,956	\$6,214	\$38,742	723%	
Drug F	\$12,683	\$5,874	\$6,809	216%	
Drug G	\$10,944	\$5,592	\$5,352	196%	
Drug H	\$11,127	\$5,443	\$5,684	204%	
Drug I	\$10,018	\$5,080	\$4,938	197%	
Drug J	\$8,569	\$4,350	\$4,219	197%	
Drug K	\$9,381	\$4,322	\$5,059	217%	
Drug L	\$8,162	\$4,290	\$3,872	190%	
Drug M	\$11,081	\$3,894	\$7,187	285%	
Drug N	\$7,794	\$3,685	\$4,109	212%	
Drug O	\$7,037	\$3,494	\$3,543	201%	
Drug P	\$7,308	\$3,485	\$3,823	210%	
Drug Q	\$6,863	\$2,498	\$4,365	275%	
Drug R	\$4,626	\$2,390	\$2,236	194%	
Drug S	\$4,139	\$2,295	\$1,844	180%	
Drug T	\$4,656	\$2,061	\$2,595	226%	

As shown in **Table Two**, the data support the conclusion that commercial payers are reimbursing medical benefit drugs at rates that are 240 percent of estimated hospital acquisition cost, on average.

We believe average sales price (ASP) to be a conservative estimate of hospitals' acquisition cost and that this analysis has likely underestimated hospital mark-ups and margins, primarily because our analysis did not account for 340B discounts. According to the Medicare Payment Advisory Commission (MedPAC), more than half of Medicare Part B outpatient drugs were administered at qualifying 340B hospitals in 2017.⁶ Similar patterns likely exist for the commercial market. MedPAC estimates that drug acquisitions at 340B hospitals are often 30 percent or more below ASP and the American Hospital Association has also stated that 340B hospitals can achieve savings of 25 to 50 percent on pharmaceutical purchases.⁷ Therefore, on average, drugs purchased at 340B prices will have larger margins (reimbursed amount divided by acquisition cost) than shown above. For instance, in the case of a drug with an ASP of \$2,500 and assuming the weighted average 240 percent of commercial insurance reimbursement to ASP reported above, payment to a non-340B hospital would exceed the hospital's cost of acquiring the drug, on average, by \$3,500. If the same drug is acquired through 340B at a conservative 25 percent discount (\$1,875), commercial insurance payment to the hospital of \$6,000 would equal 320 percent of the hospital's acquisition cost. The commercial reimbursement would exceed the acquisition cost of acquiring the drug by \$4,125, on average.⁸

⁶ Medicare Payment Advisory Commission (MedPAC). Report to the Congress: Medicare Payment Policy. March 2019. Available at: http://www.medpac.gov/docs/default-source/reports/mar19_medpac_entirereport_sec.pdf?sfvrsn=0 (Accessed May 14, 2019)

⁷ American Hospital Association. Fact Sheet: The 340B Drug Pricing Program. January 2019. Available at: <https://www.aha.org/system/files/2019-01/fact-sheet-340b-0119.pdf> (Accessed May 14, 2019)

⁸ Calculated as a commercial payment of \$6,000 [$\$2,500 * 2.40$]. Payment would exceed acquisition by approximately \$3,500 [$\$6,000 - \$2,500$] in a non-340B facility. In a 340B facility, acquisition cost would be approximately \$1,875 [$0.75 * \$2,500$], leading to a payment 3.2 times acquisition cost [$\$6,000 / \$1,875$] that exceeds acquisition cost by \$4,125 [$\$6,000 - \$1,875$].

Methodology

- Hospital reimbursement cost per claim for 2017 was obtained from the Magellan Rx Management Medical Pharmacy Trend Report™: 2018 Ninth Edition (the Magellan report).⁹ Units per claim values were calculated by dividing commercial hospital cost-per-claim data by cost-per-unit data from that report. We calculate the ASP per claim by multiplying the Medicare ASP per unit for the same period (Q4 2017) by the number of units.¹⁰ This methodology is consistent with an analysis previously conducted by the Drug Channels Institute.¹¹
- We calculated the hospital charge per claim using the average charge per unit from the 2017 Medicare 100% Outpatient Standard Analytic File and the units per claim from the Magellan report. We expect charge per unit to be roughly the same for Medicare and commercially insured patients.
- The average total mark-up and total margin across the 20 drugs were both weighted using drug-level commercial per member per month (PMPM) data from the Magellan report. Weighting by PMPM reflects both the reimbursement amount and volume that each of the 20 drugs make up in the commercial market.

⁹ The Magellan Rx Management Medical Pharmacy Trend Report™: 2018 Ninth Edition. Available at: <https://www1.magellanrx.com/magellan-rx/publications/medical-pharmacy-trend-report.aspx> (Accessed May 14, 2019)

¹⁰ Centers for Medicare & Medicaid Services. 2017 ASP Drug Pricing Files. Available at: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Part-B-Drugs/McrPartBDrugAvgSalesPrice/2017ASPFiles.html> (Accessed May 14, 2019)

¹¹ Fein, Adam. *Latest Data Show That Hospitals Are Still Specialty Drug Profiteers*. Drug Channels Institute. 2017. Available at: <http://www.drugchannels.net/2017/04/latest-data-show-that-hospitals-are.html> (Accessed May 14, 2019)