

MILLIMAN WHITE PAPER

Commercial payers spend more on hospital outpatient drugs at 340B participating hospitals

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Introduction

The 340B program, administered by the Health Resources and Services Administration (HRSA) within the U.S. Department of Health and Human Resources (HHS), allows participating hospitals to obtain certain outpatient medications at discounted rates. These hospitals (referred to as 340B hospitals) are eligible for the program based on serving a disproportionate share of low-income Medicare and Medicaid patients and other specified criteria. Because providers keep the spread between reimbursement amount and the drug's acquisition cost, there may be financial incentives for 340B participating hospitals to favor more expensive medications, especially if the spread is a percentage of acquisition price. Under these circumstances, a hospital may also want to treat more patients who use outpatient medications, which has been discussed elsewhere^{1, 2}.

The U.S. Government Accountability Office (GAO) published a study in June 2015 using 2008 and 2012 data that compared the per Medicare beneficiary hospital pharmacy outpatient drug spending at 340B hospitals to non-340B hospitals.² The findings of the GAO report showed a significantly higher per beneficiary pharmacy spend by Medicare at 340B hospitals, even when controlling for patient health status. The purpose of this report is to investigate whether the same relationships exist in a commercially insured population. To do this we used Milliman's proprietary commercial claims data set and applied a methodology similar to the 2015 GAO report.

Background

The GAO published a report in June 2015 that studied the Medicare cost difference of hospital outpatient department pharmacy spending per member between 340B and non-340B hospitals. This analysis evaluated per beneficiary drug spend for separately payable outpatient drugs for each hospital that served at least one beneficiary during the year. The GAO also separately evaluated spend per unique oncology patient seen in the hospital outpatient setting. This was performed on the Centers for Medicare and Medicaid Services (CMS) Medicare claims data set separately in 2008 and 2012 for hospitals whose 340B status remain unchanged in both time periods. The results of this study found the same conclusion in both 2008 and 2012:

“[P]er beneficiary Medicare Part B drug spending, including oncology drug spending, was substantially higher at 340B disproportionate share hospitals (DSH) than at non-340B hospitals. This indicates that, on average, beneficiaries at 340B DSH hospitals were either prescribed more drugs or more expensive drugs than beneficiaries at the other hospitals in GAO's analysis.”

The GAO found that other factors did not appear to contribute to the cost difference observed between 340B and non-340B patients. The GAO accounted for factors including patient health status, hospital characteristics, patient population served, and oncology-specific spend, and confirmed that those factors did not appear to contribute to the higher costs at 340B hospitals.

Because the GAO study only analyzed claims for a Medicare population, the per patient pharmacy cost characteristics of commercially insured patients seen at 340B hospitals remained unanswered in their report. We followed a methodology similar to the GAO and investigated a 2015 commercially insured population to determine if the relationships found in the Medicare population existed in the commercial markets.

For a variety of reasons, we could not completely replicate the GAO methodology. While Medicare has defined reimbursement structures that it uses for all hospitals, commercial reimbursement varies from payer to payer and from hospital to hospital. To compensate for this variability, we inferred national average payer fee levels based on national average Medicare fees and a multiplier to account for higher commercial reimbursement. This is described further in the Methodology section.

¹ Conti RM, Bach PB. Cost Consequences of the 340B Drug Discount Program. *JAMA*. 2013;309(19):1995–1996. doi:10.1001/jama.2013.4156. Retrieved March 9, 2018.

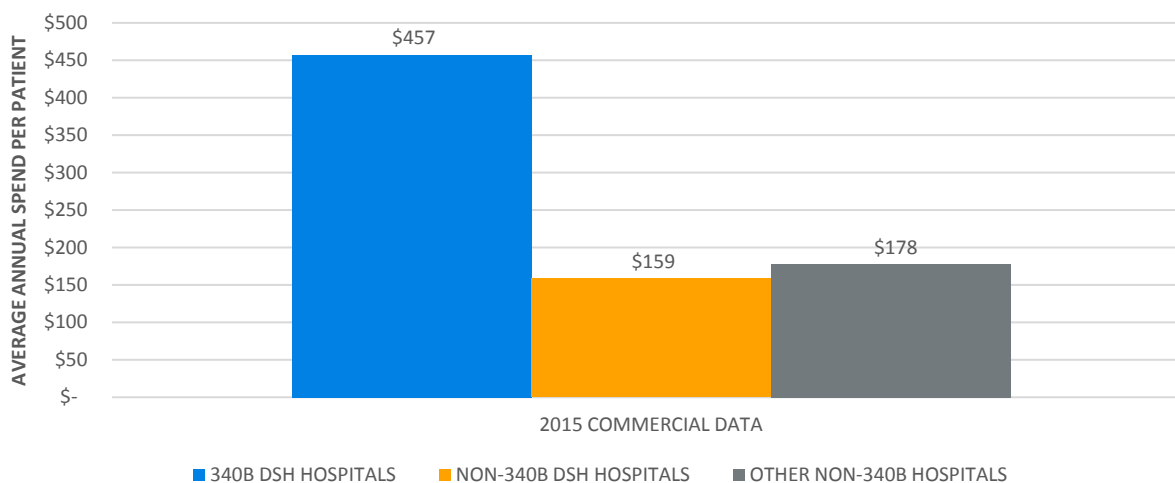
² U.S. Government Accountability Office (June 2015). MEDICARE PART B DRUGS: Action Needed to Reduce Financial Incentives to Prescribe 340B Drugs at Participating Hospitals. Publication No. GAO-15-442. Retrieved October 10, 2017, from <https://www.gao.gov/assets/680/670676.pdf>.

Results

Our study found that per patient pharmacy spend on hospital outpatient medications at 340B hospitals is higher than at a non-340B hospitals. Figure 1 compares the per patient outpatient pharmacy costs at 340B DSH hospitals versus non-340B hospitals on a per outpatient hospital patient per year basis (e.g., \$159 is the average annual amount spent on outpatient drugs per unique patient who receives outpatient services from the hospital). Due to the differences in contracted payment arrangements among commercial payers, results were repriced to a Medicare fee schedule and then converted back to a commercial allowed amount using a Medicare-to-commercial conversion factor. For more information on Medicare repricing, please see “Medicare repricing” in the Methodology and Assumptions section below.

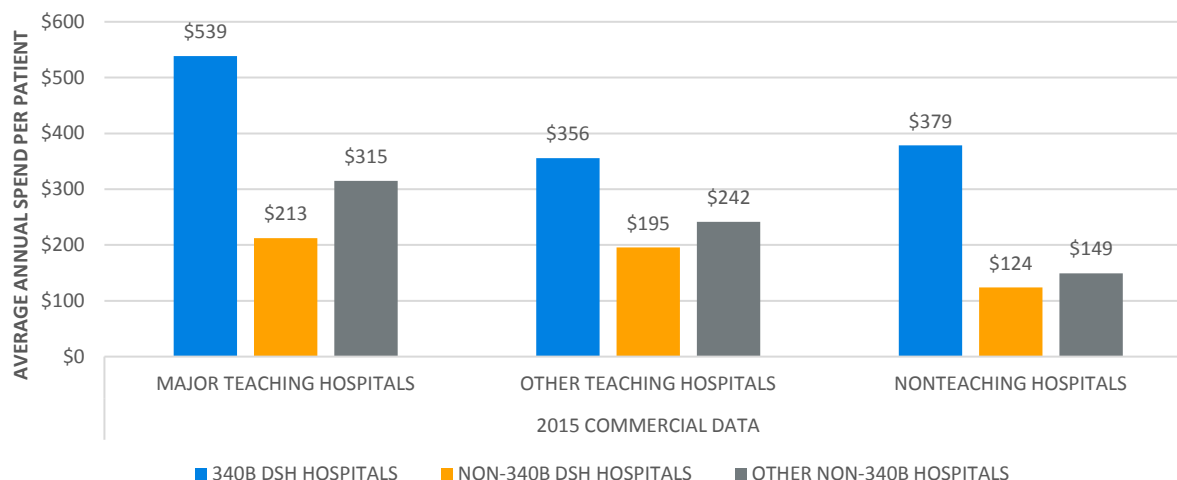
Figure 1 illustrates that per patient pharmacy spend at 340B DSH hospitals is almost three times the spend of non-340B hospitals. Figure 1 displays results for non-340B hospitals separately for DSH and non-DSH to account for a hospital's DSH percentage contributing to the spend differences. Health status was analyzed through risk score comparisons and does not appear to explain the difference in 340B spend because patients at both 340B and non-340B hospitals had similar risk scores (3.32 for 340B DSH, 3.23 for non-340B DSH, and 3.39 for other non-340B). The results below are not risk adjusted.

FIGURE 1: AVERAGE PER PATIENT SPEND ON OUTPATIENT DRUGS



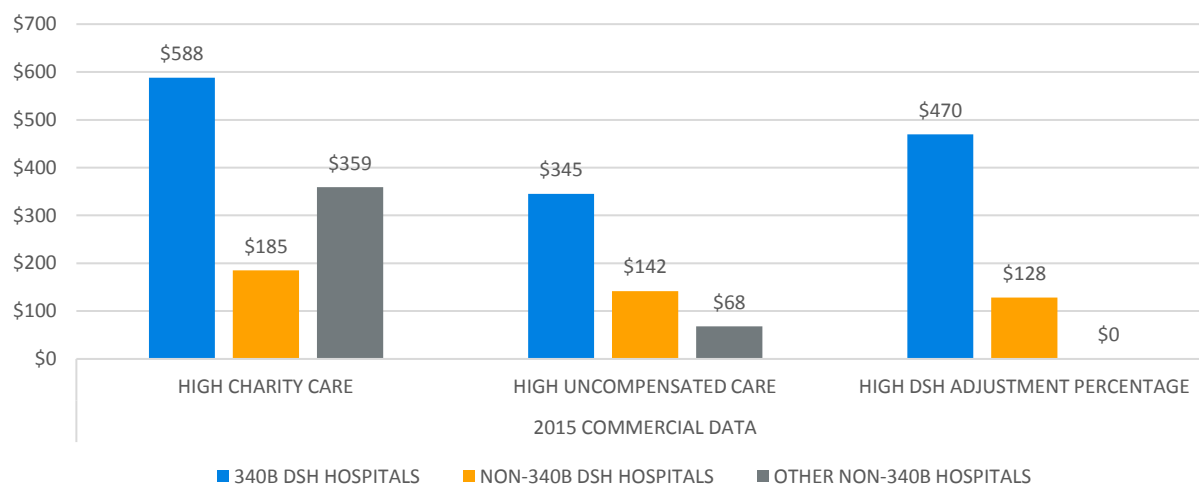
We also evaluated hospital teaching status difference in spend between 340B and non-340B. Figure 2 summarizes the results and demonstrates that outpatient pharmacy spend on a per patient basis is higher at 340B hospitals. The results suggest teaching status does not explain the difference in outpatient pharmacy spending between 340B DSH hospitals and non-340B hospitals.

FIGURE 2: AVERAGE PER PATIENT SPEND ON OUTPATIENT DRUGS BY TEACHING STATUS



We also analyzed the difference in spend between 340B and non-340B hospitals by the level of charity care, uncompensated care, or a hospital's DSH percentage. Figure 3 summarizes these results separately for high charity care, high uncompensated care, and high DSH adjustment percentage hospitals. The results illustrate that the higher per patient expenditures relationship at 340B compared to non-340B hospitals exists after stratifying by these variables. The definitions of high charity care and high uncompensated care can be found in the Methodology and Assumptions section below.

FIGURE 3: AVERAGE PER PATIENT SPEND ON OUTPATIENT DRUGS BY CHARITY CARE, UNCOMPENSATED CARE, AND DSH ADJUSTMENT PERCENTAGE



To account for oncology spend within the analysis, we used a similar methodology from the GAO study for oncology spend on an oncology-specific population. Figure 4 summarizes the per patient pharmacy spend for unique patients utilizing a hospital outpatient oncology medication for 340B and non-340B hospitals. Per patient spend for oncology

medications is higher at 340B participating hospitals, but the difference is less pronounced as compared to other figures shown in this report. It is important to note these are annual per patient spend amounts and not episode-based treatment periods.

FIGURE 4: AVERAGE NUMBER OF PATIENTS UTILIZING ONCOLOGY DRUGS AND AVERAGE PER ONCOLOGY PATIENT* SPENDING ON ONCOLOGY OUTPATIENT DRUGS**

	340 DSH	NON340B DSH	NON340B OTHER
HOSPITAL COUNT	141	164	76
PERCENTAGE OF HOSPITALS TREATING ONCOLOGY PATIENTS	23%	14%	13%
TOTAL NUMBER OF ONCOLOGY PATIENTS	5,299	1,572	486
AVERAGE NUMBER OF OUTPATIENT PATIENTS PER HOSPITAL	38	10	6
AVERAGE PER OUTPATIENT ONCOLOGY PATIENT SPENDING FOR ONCOLOGY DRUGS	\$29,506	\$26,581	\$22,167

*We defined an oncology patient as any patient treated at a hospital outpatient facility who received at least one oncology drug (see Appendix C). We did not use cancer-specific diagnosis codes to identify oncology patients. We also did not identify patients receiving non-chemotherapy oncology treatments such as radiation or surgery.

**Amounts shown in Figure 4 were calculated as the average oncology outpatient drug spending per unique oncology patient receiving at least one oncology medication.

Discussion

There are several factors to consider when comparing spend between 340B and non-340B hospitals. These factors, if not accounted for, could lead to unexplained cost differences between these two hospital types. It is important to consider the following items when drawing conclusions:

- **Risk scores**

Risk scores are commonly used as a metric to measure the overall health of a population, with a higher risk score generally considered to be a sicker population. Risk scores are calculated based upon the total cost of care and, as such, it may not be appropriate to apply a risk score adjustment to the pharmacy-only portion of a patient's total health spend. However, we do believe total cost of care risk scores may give some indication of morbidity, which could be linked to expected pharmacy costs for a patient. We presented results without a risk adjustment methodology applied, but we also reviewed the results including risk adjustment and found a similar difference in spend between 340B and non-340B facilities.

- **Site of service**

The GAO considered how site of service could influence the results on page 26 of its report. The GAO noted its study only looked at hospital outpatient pharmacy claims and recognized some patients may receive a portion of, or all, of their physician-administered medications through a physician's office. They found that the percentage of patients receiving all their medications through a hospital outpatient setting did not materially differ between 340B and non-340B hospitals. We did not specifically review this as part of our analysis and feel comfortable that the GAO's findings would be similar in a commercially insured population. However, it is possible there are differences between the commercial and Medicare market due to reimbursement differences driven by site of service in the commercial market that do not exist in Medicare. Additionally, we did not attempt to evaluate retail pharmacy outpatient claims at contract pharmacies for 340B hospitals. These claims would primarily be for self-administered medications and not generally reimbursed through the medical benefit (the focus of this study).

■ **Population included in the results**

We reviewed the results from several different viewpoints. Notably, the GAO report for the 340B versus non-340B total spend (Figure 1 above) placed all patients seen in the hospital outpatient department (regardless of whether they received a medication or not) in the denominator of its calculations. Our results are also displayed using this methodology.

We also repeated this analysis but removed all non-medication-utilizing patients from the denominator. This significantly increased the 340B hospital patients' risk scores in comparison to the non-340B hospital patients (by roughly 28%). Because the GAO report did not display these results, we do not have a direct comparison to determine if this same pattern exists within the Medicare market. Replicating this analysis on a Medicare data set and comparing the similarities and/or differences to the commercial population could enhance this study. However, using the alternative methodology would still result in a similar relationship between pharmacy spend at 340B and non-340B hospitals.

■ **Medications bundled with other services**

Currently the results displayed in this report include bundled medications, as they account for 30% of overall spend in the non-340B hospitals. We recognize 340B discounts do not apply to medications included in a bundled payment and, therefore, we also reviewed the results with bundled medications excluded. The ratio of 340B to non-340B pharmacy spend increases when bundles are removed. We believe this difference is explained by the fact that non-340B hospitals are more likely to bill pharmacy costs as bundled services, or conversely, that 340B hospitals are less likely to bundle medications so they capture 340B discounts.

■ **Medicare repricing**

An important difference between performing this analysis on a Medicare population and on a commercial population is the difference in pharmacy reimbursement. In Medicare, physician-administered medications are reimbursed at a set rate equal to an average sales price (ASP) plus methodology. In the commercial market, the range and types of negotiated payments vary significantly. To normalize for variation in reimbursement across the commercial market, we repriced all pharmacy claims to Medicare and then converted the Medicare amounts to commercial using a conversion factor of 1.74. The commercial conversion factor was calculated as the total commercial outpatient drug spend over the total Medicare repriced outpatient drug spend.

Other considerations and limitations

Factors that we did not capture in our analysis may contribute to the observed differences in costs between 340B and non-340B hospital, as described below. In addition, our method of using inferred commercial allowed amounts on a national average basis could misrepresent actual commercial reimbursement at any particular hospital. Statistical testing, which we did not perform, could provide insight into the variability of various assumptions.

Our analysis did not evaluate patient outcomes. The additional medications patients receive at 340B hospitals could lead to better outcomes. The GAO addressed this in its report and stated this factor did not account for the complete difference in spend. Additionally, a recent study published in the *New England Journal of Medicine* found that 340B-eligible hospital status did not show clear evidence of expanded care for or lower mortality among low-income patients.³

Our study was also performed on a one-year time basis. An additional enhancement could be to perform this analysis over a multiyear time period. This would allow the analysis to separately account for how costs, prescribing patterns, and hospitals' 340B status change over time. Additionally, we believe there is value in replicating this study for the Medicare population using Medicare claim data from 2015 to match the 2015 period we used.

³ Desai, S. & McWilliams, M. (February 8, 2018). Consequences of the 340B Drug Pricing Program. *New England Journal of Medicine*;378(6):539–48. Retrieved March 2, 2018, from <http://www.nejm.org/doi/full/10.1056/NEJMsa1706475>.

Unlike the GAO's study on the Medicare population, we did not have the ability to use 100% of the commercial outpatient facility drug claims due to the proprietary nature of commercial paid claims datasets. We reviewed the provider identifiable sample for reasonableness and did not find any biases as compared to our larger data sets.

The GAO report included only hospitals that did not change 340B status between 2008 and 2012. Our analysis only uses the hospital's 340B status in 2015. However, we noted that only 3% of non-340B hospitals in our 2015 sample were 340B status in 2011. Additionally, we observed that 17% of 340B hospitals in our 2015 sample were non-340B status in 2011. We believe directionally, these figures are confirmed by industry trends. We believe that these findings do not materially affect the results for hospitals that were non-340B in 2015 and were previously 340B in 2011. Hospitals new to the 340B program within the prior four years may not exhibit prescribing characteristics similar to hospitals that were in the program in both 2011 and 2015. The results for 340B hospitals may be higher if we excluded hospitals that were 340B in 2011 and 2015.

We also did not evaluate how drug mix or pharmacy utilization may contribute to the cost difference between 340B and non-340B pharmacy spend. Evaluating the amount and types of medications used could help determine what is driving the cost differences.

Lastly, we did not study how 340B discounts are passed on to the patients and / or payers. It is possible these discounts are indirectly passed through to patients by the hospital offering additional services and through discounted contracting terms with payers.

Methodology and assumptions

DATA SOURCES

We used Milliman's 2015 Consolidated Health Cost Guidelines™ (CHSD) database and the Health Resources and Services Administration (HRSA) 340B database. The CHSD data set contains over 380 million member months from commercial lines of business and is a consolidation of member experience data contributed by numerous health plans throughout the nation. When limiting the data to the hospitals and members receiving outpatient hospital services studied in this report, there are approximately 23 million member months. See Appendix A for total hospitals and patients included in the study. Prior to using the data, we validated it for consistency and overall reasonability. We reviewed the top Healthcare Common Procedure Coding System (HCPCS) codes by spend for reasonability.

INCLUDED DATA

To be included in the study, a hospital had to treat at least one patient in the hospital outpatient setting during the 2015 calendar year. We limited our data to hospital outpatient department claims from hospitals providing acute care. As such, we excluded the following providers:

1. Any hospital not providing acute care
2. Hospitals outside of the 50 states and Washington, D.C.
3. Prospective Payment System (PPS)-exempt hospitals
4. Freestanding cancer centers
5. Sole community hospitals
6. Children's hospitals
7. Rural referral centers
8. Critical access hospitals

In addition, we omitted costs associated with medication administration, as well as any other costs bundled with the outpatient pharmacy claim.

IDENTIFYING HOSPITAL TYPES

We used a combination of Medicare IDs and National Provider Identifier (NPI) to identify 340B participating and nonparticipating hospitals. We used the list provided at the Health Resources and Services Administration (HRSA) website to identify hospitals participating in the 340B program in calendar year 2015. For hospitals that change status within 2015, we used the hospital's status at the beginning of the year. We identified DSH and non-DSH hospitals using the DSH public use file (PUF) reports from CMS.

We determined which facilities were teaching hospitals based on definitions from CMS. A major teaching hospital is defined as a hospital that is a member of the Council of Teaching Hospitals (COTH). Other teaching hospitals include “limited” teaching hospitals (hospitals that are not a member of COTH but have at least one intern and resident) and graduate teaching hospitals. See Appendix B for a detailed count of hospital types included in our study.

High charity and high uncompensated care hospitals were identified as the hospitals providing the top quartile of charity care and uncompensated care of all the hospitals studied. High DSH adjustment percentage hospitals are defined as hospitals having an 11.75% DSH adjustment percentage or higher.

IDENTIFYING HOSPITAL OUTPATIENT DEPARTMENT AND ONCOLOGY MEDICATIONS

We used Milliman’s Health Cost Guidelines (HCGs) grouper to identify hospital outpatient and outpatient oncology medications. Milliman’s grouper uses a combination of HCPCS, revenue codes, bill types, place of service, and other data to group claims. We removed any non-medication cost (i.e., administration) and vaccines from the analysis.

We identified cancer patients as those members taking at least one medication on a list of oncology-specific medications approved as of 2015. This list was developed by two pharmacists independently and then reconciled into a final list. The intent of this method was to include a list of medications that positively identified oncology patients. Please see Appendix C for a list of J codes used to identify oncology drugs. A limitation includes inability to identify oncology-specific medications if billed under non-specific codes such as J3490, J3590, and J9999. When comparing per patient expenditures specific to oncology patients, we summed all medication-based oncology spend, as defined by the Milliman HCGs (excluding non-medication costs), for those individuals. We recognize that some of these medications might be utilized for non-oncology related conditions and did not adjust for these conditions.

MEDICARE REPRICING

We repriced all claims to Medicare-allowed amounts and then converted back to a commercial-allowed amount using a conversion factor. This factor was calculated as the total commercial outpatient drug spend over the total Medicare repriced outpatient drug spend. We did not apply any geographic area adjustments to the repriced Medicare allowed amounts. All claims were repriced to a Medicare basis to normalize for any variation that may exist in commercial contracted reimbursement rates.

To calculate the Medicare-allowed amount for bundled claims, we unbundled these services and assigned a Medicare amount based on the distribution of commercial-allowed charges for services within the bundled claim.

RISK SCORE ANALYSIS

To normalize for morbidity and demographic differences, we evaluated the risk score differences among the population of individuals treated at each hospital type. We used Milliman Advanced Risk Adjusters™ (MARA™) to compute each member’s risk scores. This is Milliman’s proprietary internal risk model, which differs from the Medicare Hierarchical Condition Category (HCC) risk score that was used in the GAO report. We used concurrent risk scores computed based on the member’s medical diagnoses. The risk score computation accounts for expected total cost of care based on medical diagnosis codes for the 2015 cohort studies.

Caveats and qualifications

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in actuarial communications. I, Jason Gomberg, am a consulting actuary for Milliman, Inc. I am a member of the American Academy of Actuaries, and I meet the qualification standards of the American Academy of Actuaries to render the actuarial analysis contained herein.

In analyzing the data set to develop claim cost, we used the 2015 Consolidated Health Cost Guidelines Sources Database, Milliman Health Cost Guidelines, and the HRSA 340B database. We did not audit or independently verify any of the information furnished, except that we did review the data for reasonableness and consistency. To the extent that any of the data or other information relied on was incorrect or inaccurate, the results of our analysis could be materially affected.

In preparing our results, we relied upon the methodology and study design in the GAO 2015 340B report. Our results will likely vary due to new information or proposed changes to the 340B program.

The information was provided to PhRMA and is intended to help in understanding the differences in hospital outpatient department pharmacy spend between 340B participating and nonparticipating hospitals for commercially insured patients. This work is not intended to be used for other purposes or to benefit any other party. Our work (this report) may not be provided to third parties without our prior written consent. If consent is given, this report must be provided in its entirety. Regardless of consent, it is not our intent to benefit or create a legal liability to outside parties.

The terms of Milliman's Master Services Agreement with PhRMA effective January 19, 2016, apply to this report and its use.

Appendix A

DATA INCLUDED IN STUDY

	HOSPITAL COUNT	PATIENT COUNT
TOTAL ACUTE HOSPITALS IDENTIFIED	2,792	NA
TOTAL CHSD (QUALITY FILTER APPLIED)	2,791	34,409,337
CHSD OUTPATIENT ONLY	2,779	16,523,228
CHSD COMMERCIAL POPULATION	2,585	12,356,632
STUDIED POPULATION	2,341	1,623,444
ONCOLOGY POPULATION	385	7,376

Appendix B

HOSPITALS INCLUDED IN STUDY

CHARACTERISTIC	340B DSH HOSPITALS	NON-340B DSH HOSPITALS	OTHER NON-340B HOSPITALS
ALL HOSPITALS	623	1,138	567
MAJOR TEACHING HOSPITALS	195	124	46
OTHER TEACHING HOSPITALS	144	219	91
NONTEACHING HOSPITALS	284	795	430

Appendix C

ONCOLOGY DRUG PROCEDURE CODES

PROCEDURE CODE	DESCRIPTION	PROCEDURE CODE	DESCRIPTION
0594	BUSULFAN INJECTION	J9050	CARMUSTINE INJECTION
J0894	DECITABINE INJECTION	J9055	CETUXIMAB INJECTION
J1442	INJ FILGRASTIM EXCL BIOSIMIL	J9060	CISPLATIN 10 MG INJECTION
J1446	INJ, TBO-FILGRASTIM, 5 MCG	J9065	INJ CLADRIBINE PER 1 MG
J2505	INJECTION, PEGFILGRASTIM 6MG	J9070	CYCLOPHOSPHAMIDE 100 MG INJ
J2820	SARGRAMOSTIM INJECTION	J9098	CYTARABINE LIPOSOME INJ
J8510	ORAL BUSULFAN	J9100	CYTARABINE HCL 100 MG INJ
J8520	CAPECITABINE, ORAL, 150 MG	J9120	DACTINOMYCIN INJECTION
J8521	CAPECITABINE, ORAL, 500 MG	J9130	DACARBAZINE 100 MG INJ
J8530	CYCLOPHOSPHAMIDE ORAL 25 MG	J9145	INJECTION, DARATUMUMAB 10 MG
J8560	ETOPOSIDE ORAL 50 MG	J9150	DAUNORUBICIN INJECTION
J8562	ORAL FLUDARABINE PHOSPHATE	J9151	DAUNORUBICIN CITRATE INJ
J8600	MELPHALAN ORAL 2 MG	J9155	DEGARELIX INJECTION
J8610	METHOTREXATE ORAL 2.5 MG	J9160	DENILEUKIN DIFTITOX INJ
J8700	TEMOZOLOMIDE	J9165	DIETHYLSTILBESTROL INJECTION
J8705	TOPOTECAN ORAL	J9171	DOCETAXEL INJECTION
J8999	ORAL PRESCRIPTION DRUG CHEMO	J9175	ELLIOTTS B SOLUTION PER ML
J9000	DOXORUBICIN HCL INJECTION	J9176	INJECTION, ELOTUZUMAB, 1MG
J9001	DOXORUBICIN HCL LIPOSOME INJ	J9178	INJ, EPIRUBICIN HCL, 2 MG
J9002	DOXIL INJECTION	J9179	ERIBULIN MESYLATE INJECTION
J9010	ALEMTUZUMAB INJECTION	J9181	ETOPOSIDE INJECTION
J9015	ALDESLEUKIN INJECTION	J9185	FLUDARABINE PHOSPHATE INJ
J9017	ARSENIC TRIOXIDE INJECTION	J9190	FLUOROURACIL INJECTION
J9019	ERWINAZE INJECTION	J9200	FLOXURIDINE INJECTION
J9020	ASPARAGINASE, NOS	J9201	GEMCITABINE HCL INJECTION
J9025	AZACITIDINE INJECTION	J9202	GOSERELIN ACETATE IMPLANT
J9027	CLOFARABINE INJECTION	J9205	INJ IRINOTECAN LIPOSOME 1 MG
J9031	BCG LIVE INTRAVESICAL VAC	J9206	IRINOTECAN INJECTION
J9032	INJECTION, BELINOSTAT, 10MG	J9207	IXABEPILONE INJECTION
J9033	INJ., TREANDA 1 MG	J9208	IFOSFAMIDE INJECTION
J9034	INJ., BENDEKA 1 MG	J9209	MESNA INJECTION
J9035	BEVACIZUMAB INJECTION	J9211	IDARUBICIN HCL INJECTION
J9039	INJECTION, BLINATUMOMAB	J9212	INTERFERON ALFACON-1 INJ
J9040	BLEOMYCIN SULFATE INJECTION	J9213	INTERFERON ALFA-2A INJ
J9041	BORTEZOMIB INJECTION	J9214	INTERFERON ALFA-2B INJ
J9042	BRENTUXIMAB VEDOTIN INJ	J9215	INTERFERON ALFA-N3 INJ
J9043	CABAZITAXEL INJECTION	J9216	INTERFERON GAMMA 1-B INJ
J9045	CARBOPLATIN INJECTION	J9217	LEUPROLIDE ACETATE SUSPNSION
J9047	INJECTION, CARFILZOMIB, 1 MG	J9218	LEUPROLIDE ACETATE INJECTON

PROCEDURE CODE	DESCRIPTION
J9219	LEUPROLIDE ACETATE IMPLANT
J9225	VANTAS IMPLANT
J9226	SUPPRELIN LA IMPLANT
J9228	IPILIMUMAB INJECTION
J9230	MECHLORETHAMINE HCL INJ
J9245	INJ MELPHALAN HYDROCHL 50 MG
J9250	METHOTREXATE SODIUM INJ
J9260	METHOTREXATE SODIUM INJ
J9261	NELARABINE INJECTION
J9262	INJ, OMACETAXINE MEP, 0.01MG
J9263	OXALIPLATIN
J9264	PACLITAXEL PROTEIN BOUND
J9265	PACLITAXEL INJECTION
J9266	PEGASPARGASE INJECTION
J9267	PACLITAXEL INJECTION
J9268	PENTOSTATIN INJECTION
J9270	PLICAMYCIN (MITHRAMYCIN) INJ
J9271	INJ PEMBROLIZUMAB
J9280	MITOMYCIN INJECTION
J9293	MITOXANTRONE HYDROCHL / 5 MG
J9295	INJECTION, NECITUMUMAB, 1 MG
J9299	INJECTION, NIVOLUMAB
J9300	GEMTUZUMAB OZOGAMICIN INJ
J9301	OBINUTUZUMAB INJ
J9302	OFATUMUMAB INJECTION
J9303	PANITUMUMAB INJECTION
J9305	PEMETREXED INJECTION
J9306	INJECTION, PERTUZUMAB, 1 MG
J9307	PRALATREXATE INJECTION
J9308	INJECTION, RAMUCIRUMAB
J9310	RITUXIMAB INJECTION
J9315	ROMIDEPSIN INJECTION
J9320	STREPTOZOCIN INJECTION
J9325	INJ TALIMOGENE LAHERPAREPVEC
J9328	TEMOZOLOMIDE INJECTION

PROCEDURE CODE	DESCRIPTION
J9330	TEMSIROLIMUS INJECTION
J9340	THIOTEPA INJECTION
J9351	TOPOTECAN INJECTION
J9352	INJECTION TRABECTEDIN 0.1MG
J9354	INJ, ADO-TRASTUZUMAB EMT 1MG
J9355	TRASTUZUMAB INJECTION
J9357	VALRUBICIN INJECTION
J9360	VINBLASTINE SULFATE INJ
J9370	VINCRISTINE SULFATE 1 MG INJ
J9371	INJ, VINCRISTINE SUL LIP 1MG
J9390	VINORELBINE TARTRATE INJ
J9395	INJECTION, FULVESTRANT
J9400	INJ, ZIV-AFLIBERCEPT, 1MG
J9600	PORFIMER SODIUM INJECTION
J9999	CHEMOTHERAPY DRUG
J9062	CISPLATIN 50 MG INJECTION
J9080	CYCLOPHOSPHAMIDE 200 MG INJ
J9090	CYCLOPHOSPHAMIDE 500 MG INJ
J9091	CYCLOPHOSPHAMIDE 1.0 GRM INJ
J9092	CYCLOPHOSPHAMIDE 2.0 GRM INJ
J9093	CYCLOPHOSPHAMIDE LYOPHILIZED
J9094	CYCLOPHOSPHAMIDE LYOPHILIZED
J9095	CYCLOPHOSPHAMIDE LYOPHILIZED
J9096	CYCLOPHOSPHAMIDE LYOPHILIZED
J9097	CYCLOPHOSPHAMIDE LYOPHILIZED
J9110	CYTARABINE HCL 500 MG INJ
J9140	DACARBAZINE 200 MG INJ
J9290	MITOMYCIN 20 MG INJ
J9291	MITOMYCIN 40 MG INJ
J9350	TOPOTECAN INJECTION
J9375	VINCRISTINE SULFATE 2 MG INJ
J9380	VINCRISTINE SULFATE 5 MG INJ
J9170	DOCETAXEL INJECTION
J9182	ETOPOSIDE 100 MG INJ



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