340B Data from the ESP and Beacon Platforms Hold Considerable Value for Drug Manufacturers

Charles J. Courtemanche

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University of Kentucky
244 Gatton College of Business and Economics
Lexington, KY 40506-0034
http://isfe.uky.edu/

Gatton College of Business and Economics

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Charles Courtemanche
Professor of Economics; Director, Institute for the Study of Free Enterprise
Gatton College of Business and Economics
University of Kentucky
Research Associate, National Bureau of Economic Research
Research Fellow, Institute of Labor Economics (IZA)
Email: courtemanche@uky.edu

Executive Summary

Drug manufacturers increasingly require 340B covered entities to submit claims through the Enhanced Services Platform (ESP), which was developed by a company – Second Sight Solutions, LLC – with extensive connections to the pharmaceutical industry. The same company has also developed the Beacon platform, designed to be used with the rebate model promoted by manufacturers. The purported justification for these actions is to eliminate double discounting, such as when 340B discounts and Medicaid Drug Program rebates are given for the same prescription.

However, this report argues that the benefits to pharmaceutical companies of mandating the use of industry-connected platforms and imposing a rebate model extend far beyond this stated purpose. Based on government audit data, I estimate the total amount of double discounting to be $3.13 billion annually, with full utilization of Second Sight's platforms having the potential to recover roughly half that amount. In contrast, I estimate that other sources of value not acknowledged by manufacturers – avoiding paying valid claims, developing derivative data products for lobbying purposes, targeting and influencing health care providers, and selling licenses to data – add up to a much more substantial $9.33 billion per year. This represents over 11% of the total amount of 340B discounts given out annually by manufacturers.

I therefore conclude that the combination of manufacturer-mandated data submission platforms with a rebate model reveal an attempt by the pharmaceutical industry to extract information of value from covered entities without providing compensation. This implies a broader goal of reducing the cost of the 340B program by any means possible, as opposed to merely preventing duplicate discounting. Anecdotal evidence from covered entities' early experience with Second Sight's platforms provides additional support for this viewpoint.

I. Introduction

The basic premise of economics is that people and organizations should be expected to respond to incentives in ways that suit their own self-interest. In disputes, this points to the need for a neutral decider. We should expect an unfair outcome in a sports event if players from one team also get to be referees, for instance. In the same way, when evaluating the best mechanism for determining the validity of 340B claims, we should expect unfair outcomes if the party empowered with making these decisions stands to gain or lose based on them.

While no one disputes that preventing invalid uses of the 340B program such as duplicate discounting is a worthy objective, the only fair solution is for the government to assume the role of data collector and referee. In contrast, the Enhanced Services Platform (ESP) that most drug manufacturers *require* covered entities to use in order to be eligible for 340B discounts was developed and is administered by Second Sight, LLC, a subsidiary of a company that receives substantial funding from the pharmaceutical industry. The newer Beacon platform, also developed by Second Sight, goes even further and implements a rebate model, which drug manufacturers – as rational entities acting in their own self-interest in accordance with basic economic theory – could be expected to use to delay or deny as many 340B rebates as possible.

In effect, a rebate model switches the default from the 340B discount being granted unless further information reveals it should not be to the discount not being granted unless further information reveals that it should – with a company that has a financial relationship with manufacturers deciding whether the information is sufficient. A long literature in economics documents the importance of defaults (Jachimowicz, 2019), and they are likely to be especially important for 340B given the program's historical lack of a robust dispute resolution system (HRSA, 2025b; HRSA, 2026). Drug company actions implicitly acknowledge this point: by

spending presumably millions of dollars towards the development of and lobbying for a claims submission platform that utilizes a rebate model, they reveal an expectation that the returns to such a system must be even greater. The combination of a rebate model with a proprietary database with financial ties to the pharmaceutical industry creates conditions similar to those that enable insurance companies to take advantage of their decision-making authority and private data to deny patient claims.

In short, by mandating the use of ESP (and eventually Beacon), drug manufacturers are forcing covered entities and contract pharmacies to submit claims data – a product of considerable value that is costly to provide – with no compensation. Moreover, the terms and conditions of these platforms grant Second Sight the right to sublicense the data and create derivative works at their sole discretion, creating additional value. This report aims to illustrate the potential value to manufacturers by describing and quantifying the different sources of this value. While it is not possible with available information to predict the magnitude of the impacts with certainty, my estimates still suffice to illustrate the point that the value has the potential to be substantial – and that much of it comes at the direct expense of covered entities.

The report proceeds as follows. I begin by providing background information about the 340B program and the ESP and Beacon platforms. I then turn to the potential sources of value for pharmaceutical manufacturers from mandating use of these platforms and imposing a rebate model. The purported justification for these changes is reducing double discounting, which occurs when 340B discounts and Medicaid Drug Program rebates are erroneously both given for the same prescription. Based on US government audit data, I estimate the total amount of duplicate discounting to be $3.13 billion per year, which is less than 4% of the size of the 340B

program. Under plausible assumptions, full utilization of Second Sight's data platforms can be expected to recover about $1.57 billion.

The other sources of value – which are not acknowledged by the pharmaceutical industry – combine to be much more substantial. The first of these is the ability to avoid paying valid claims, which is dramatically enhanced by the switching of defaults in the Beacon platform. Avoiding paying valid claims can be done not only through outright denial but also through bureaucratic red tape that is costly for covered entities and contract pharmacies to navigate, ultimately causing them to give up on getting valid claims paid. Assuming similar improper denial patterns to the health insurance industry, I estimate this source of value to be $7 billion per year. The next source of value comes from using derivative data products for the purposes of lobbying policymakers, without covered entities having access to the same underlying data to respond. I estimated this to have an expected value of $352 million, though it could be much larger if the information helps lead to major legislative changes in the 340B program. Additionally, drug companies can use the data to better target and influence health care providers – a source of value I estimate at $1.98 billion. Finally, an additional value (estimated at $11.8 million) comes from the ability to sell licenses to the data to other businesses and researchers. Together, these other sources of value sum to $9.33 billion per year, which is almost six times the estimated value from reducing double discounting and almost three times the entire amount of double discounting. It also represents over 11% of the size of the entire 340B program.

I therefore conclude that the combination of manufacturer-mandated data submission platforms with a rebate model reveals an attempt by the pharmaceutical industry to extract information of value from covered entities without providing compensation. In contrast to the claims made by the pharmaceutical industry that these changes are merely intended to stop

double discounting, their actual value is much larger in size and scope. These sources of value come largely at the expense of covered entities and contract pharmacies, who incur substantial administrative costs to provide the data, face reductions in 340B revenue from claim denials, and are harmed if pharmaceutical industry lobbying efforts are successful. The overall picture that emerges is one of drug companies trying to reduce the burden of the 340B program by any means possible. Covered entities' early experiences with Second Sight's platforms are consistent with this objective.

II. Background

A. 340B Program

The 340B drug pricing program, established by the Veterans Health Care Act of 1992, aims to improve access to medical care in vulnerable communities without requiring additional federal resources (Health Resources and Services Administration (HRSA), 2024). It enables qualified health care providers, called "covered entities", to purchase drugs administered or prescribed in outpatient settings at a discount from pharmaceutical manufacturers. This only applies if the prescription is filled at a pharmacy within the facility or an external pharmacy with which the provider has a 340B contract ("contract pharmacy"). In such cases, the covered entity receives the usual payment from the patient and/or his or her insurer, for a fee if a contract pharmacy is involved. The covered entity then purchases a replacement drug for the pharmacy at the discounted 340B price, leading to a higher margin than would otherwise be obtained (Government Accountability Office 2018).

The 340B program provides a vital source of financing for hospitals and other facilities that are required to treat low-income and uninsured patients regardless of ability to pay. In 2024, an estimated $81.4 billion in drug purchases covered by 340B were made (HRSA, 2025a).

Arguing that the expansion of contract pharmacy networks has grown the program beyond its original intent, drug companies have unilaterally imposed a number of restrictions, triggering a wave of legislative and legal battles (Courtemanche and Garuccio, 2026). The required use of Second Sight's platforms and effort to impose a rebate model are two such examples.

While the 340B program has indeed grown substantially since its inception, this was the result of changes to program rules that pharmaceutical manufacturers agreed to via a give-and-take bargaining process. The Medicare Modernization Act (MMA) of 2003 expanded the number of eligible facilities, but it also increased drug company revenues by implementing the Medicare Part D program while prohibiting drug reimportation and price negotiating by the government (Oliver et al., 2004). The Patient Protection and Affordable Care Act of 2010 (ACA) further expanded 340B eligibility (ACA 2010), while concurrent HRSA guidance allowed an unlimited number of contract pharmacies (HRSA, 2010). However, in return, pharmaceutical manufacturers gained access to tens of millions of newly insured customers, while also avoiding the price reductions a single-payer system would have brought (Norman and Karlin-Smith 2016).

A recently published review by Courtemanche and Garuccio (2026) examines the scholarly literature to date on the impacts of the 340B program. They cite vast anecdotal and descriptive evidence of covered entities using 340B funds to increase access to care for low-income individuals or expand the scope of services offered. However, they note that there is insufficient causally interpretable evidence available to draw conclusions about other important outcomes.

Duplicate discounting has become an important source of contention in the 340B program. This results from the intersection of 340B with the Medicaid Drug Rebate Program, which was established to mitigate the costs to federal and state governments of outpatient drugs

dispensed to Medicaid and Medicaid Managed Care patients. When a prescription is eligible for both a 340B discount and a Medicaid rebate, federal law only requires manufacturers to pay one of these. However, the fact that 340B and Medicaid data are split at the point of sale into separate systems managed by different parties can make this challenging to monitor and lead to both discounts being given (Hardaway, 2016). Another source of double discounting is multiple covered entities claiming a 340B discount for the same patient (Nikpay et al., 2024).[1]

The current process for preventing duplicate discounting is fragmented. For fee-for-service Medicaid, covered entities are expected to identify their facilities on the HRSA-maintained Medicaid Exclusion File, which states can use to flag 340B-purchased drugs so those claims are excluded from state Medicaid rebate requests (Hardaway, 2016). However, HRSA only intends for the Medicaid Exclusion File to be used for fee-for-service Medicaid (HRSA, 2014). For Medicaid Managed Care claims, which became eligible for Medicaid rebates under the Affordable Care Act (ACA), the managed care plans themselves are responsible for preventing duplicate discounting, as opposed to the covered entities. These processes are imperfect, as 25% of over 350 covered entities audited between 2012 and 2015 were found to have at least one duplicate discounting error (Hardaway, 2016). Nonetheless, since being flagged by the audit could result from a single error out of potentially thousands of transactions, the overall percentage of transactions for which an error occurred was presumably much less than 25%.

[1] A "double discount" refers generally to sales where the manufacturer is subject to a discount or rebate under two separate authorities regardless of what those authorities are. In contrast, "duplicate discount" refers specifically to sales where the manufacturer is subject to the 340B discount and a Medicaid Drug Rebate Program rebate.

B. ESP Database

The 340B ESP platform utilizes a claims-based algorithm to identify drugs likely subject to both a pharmacy benefit manager discount and a 340B discount, thereby functioning as a duplicate discount prevention tool (Nikpay and Halvorson, 2023). Drug manufacturers require covered entities to submit their contract pharmacies' claims data to ESP as a condition of shipping 340B-priced drugs to those pharmacies, with efforts currently being made to extend this requirement to in-house pharmacies as well (Eli Lilly, 2026). Importantly, requiring the submission of data to ESP to receive 340B discounts is an entirely manufacturer-imposed restriction that has no basis in existing 340B law. ESP then links these claims data to Medicaid and commercial rebate data maintained by pharmaceutical manufacturers to identify duplicate discounts (Second Sight Solutions, 2020). Appendix Table 1 at the end of this document provides a list of the data elements that must be reported for each claim (340B ESP, 2024). As of 2022, over 2,200 covered entities had registered on ESP, submitting a total of around 790,000 claims per month. Sixteen of the eighteen drug manufacturers that had imposed conditions on 340B pricing at contract pharmacies were using 340B ESP to administer their policies (Mirga, 2022).

While identifying and preventing double discounting is a worthwhile objective, problematic incentives arise from the involvement of pharmaceutical manufacturers with the platform. ESP was developed through the creation of a new company Second Sight Solutions, LLC, which is a subsidiary of the larger consulting firm Berkeley Research Group (BRG) (Young, 2025). The financial relationship between BRG and the pharmaceutical industry is a significant point of controversy. BRG has conducted several studies funded by the Pharmaceutical Research and Manufacturers of America (PhRMA), the main pharmaceutical industry trade group. ESP's Founder and Business Development Lead Aaron Vandervelde, who

is also Managing Director at BRG, has authored studies about the 340B program on behalf of PhRMA, and has also done work for the drug-company-led advocacy group AIR 340B and the Community Oncology Alliance (COA). PhRMA, AIR 340B, and COA have cited Vandervelde's research in arguments against the current form of the 340B program.

C. Beacon Database

Beacon Channel Management, also developed by Second Sight Solutions, enables pharmaceutical manufacturers to transition select 340B drugs from an upfront discount model to a rebate model. The rebate model requires covered entities to purchase drugs at the manufacturer's list price, then submit purchase and claims data through the Beacon platform to receive reimbursement for the amount of the 340B discount. Appendix Table 2 lists the data elements that must be reported for each claim (Beacon Support Center, 2025). Since the start of 2026, manufacturers participating in the Medicare Maximum Fair Price (MFP) program have been using a version of the Beacon platform called Beacon MFP (Johnson & Johnson, 2025).

Although the Beacon rebate platform is not yet widely in use, this timeline as well as the substantial financial investment in a new platform gives the impression of it being a next-generation version of ESP that adds a new source of savings for pharmaceutical companies: the ability to refuse to pay claims, as opposed to trying to claw back discounts that have already been given. In effect, Beacon puts Second Sight in the position of being judge, jury, and executioner when it comes to denying claims. The conflict of interest given Second Sight's entanglements with drug manufacturers raises the question of whether these powers will be used to excessively deny claims or subject covered entities to a process that is so burdensome as to deter submission. The difficulties with the rollout of the ESP platform noted above also raise the question of

whether similar glitches could delay the payment of valid claims for a long enough time to cause liquidity problems for providers.

III. Value for Pharmaceutical Manufacturers

A. Eliminating Double Discounting

Drug manufacturers claim that the purpose of Second Sight's platforms is to identify double discounting and readily admit that they stand to profit from the ESP system's identification of improper claims. For instance, in "Update to Lilly's 340B Distribution Program for In-House Pharmacies," Eli Lilly (2026) states that:

> *Among other things, this basic claims data permitted us to identify countless instances of Medicaid duplicate discounts, instances where multiple covered entities sought replenishment on the same unit of 340B program, and to produce the evidence required by HRSA to initiate audits.*

The starting point for understanding the value of identifying double discounting is to estimate the amount of double discounting that existed prior to the rollout of ESP. Unfortunately, such estimates are scarce. The most widely cited source for the amount of 340B/Medicaid double discounting is Hardaway (2016), who tabulates covered entity audit results from 2012 (when audits began) through 2015 and reports that 25% of entities audited by the Office of Pharmacy Affairs (OPA) had at least one double discounting error. I update his analysis through 2025 using the audit findings listed by HRSA (2026b). Table 1 reports the results. Combining the numbers of total audits and those that found double discounting from 2012 though 2015 replicates Hardaway's 25% exactly. Adding in the years through 2025 leads to a very similar rate of 24%.

Therefore, the most comprehensive neutral source available indicates that 24% of covered entities had at least some double discounting.[2]

Table 1 – Office of Pharmacy Affairs 340B Covered Entity Audits by Year

Year	Number of Covered Entities Audited	Number with Duplicate Discounting	Percentage of Audited Covered Entities with Duplicate Discounting
2012	51	18	35%
2013	94	25	27%
2014	98	23	23%
2015	197	46	23%
2016	199	54	27%
2017	196	49	25%
2018	198	64	32%
2019	198	60	30%
2020	200	41	21%
2021	199	38	19%
2022	198	41	21%
2023	175	44	25%
2024	177	32	18%
2025	115	24	21%
Total	**2,295**	**559**	**24%**

However, the available summary audit results do not specify the *amount* of double discounting by these covered entities. To do so, begin by noting that 340B/Medicaid duplicate discounting only occurs for Medicaid patients, so a ceiling can be established by computing the share of covered entity patients on Medicaid. This information is available for 340B hospitals (20%; Popovian et al., 2026), Federally Qualified Health Centers / Community Health Centers (49%; Pillaiet al. 2026), and Ryan White HIV / AIDS Program clinics (39%; Kaiser Family Foundation, 2025). These types of entities are responsible for 78%, 6%, and 3.5% of 340B

[2] Between 2015 and 2026, manufacturers conducted 53 audits, finding overcharging in 25 of them. While the rate is higher than that found in the government audits, it is unclear if manufacturer audits were done randomly, as opposed to targeting covered entities with which they had the most suspicion. Adding these 53 additional audits to the data in Table 1 only slightly increases the overall percentage with duplicate discounting to 25%.

revenue, respectively (HRSA, 2025c), yielding a weighted average share of Medicaid patients of 23%.

Among these Medicaid patients, 70% are on managed care plans and 30% are on fee-for-service Medicaid (Mirga, 2023). Although there are no known estimates of the percentage of drugs prescribed by covered entities to Medicaid patients that are erroneously double discounted, the problem is perceived to be worse for managed care patients (Hardaway, 2016). Therefore, I assume that 50% of covered-entity-prescribed drugs prescribed to Medicaid managed care patients are double discounted, compared to 25% for Medicaid fee-for-service patients.

Let $A =$ the proportion of covered entities with at least one duplicate discount based on audit data, $M =$ the proportion of patients at these covered entities who are on Medicaid and therefore are possible candidates for duplicate discounting, $MMC =$ the proportion of Medicaid patients on managed care as opposed to fee-for-service, $DMC =$ the proportion of Medicaid managed care 340B prescription fills that are duplicate discounted, and $DF =$ the proportion of Medicaid fee-for-service 340B prescription fills that are duplicate discounted. The proportion of all 340B fills given duplicate discounts D can be expressed as

$$D = A * M(MMC * DMC + (1 - MMC) * DF).$$

Calibrating using the above numbers yields

$$D = 0.24 * 0.23(0.7 * 0.5 + (1 - 0.7) * 0.25) = 0.023.$$

In other words, 2.3% of 340B fills receive duplicate discounts. Assuming all the same proportions apply to revenues, we can compute the annual revenue lost by pharmaceutical manufacturers to duplicate discounting by multiplying this percentage by the overall size of the 340B program, $81.4 billion (as noted in Section II). Doing so leads to an estimate of $1.91 billion.

As for the other type of double discounting – multiple covered entities claiming a discount for the same patient – Nikpay et al. (2024) estimate this to occur in 1% to 2% of cases using data from Medicare Part D. Assume that the percentages observed for Medicare Part D are the same for other payors and that these percentages apply to revenue as well as claims. By using the midpoint of the given range (1.5%) and an $81.4 billion size of the 340B program, multiple entities claiming the same discount accounts for $1.22 billion. Adding the two types of double discounting therefore yields $3.13 billion.

If ESP is able to identify 100% of double discounting violations and pharmaceutical manufacturers are able to recoup 100% of those losses, then the value to manufacturers would be the full $3.09 billion. However, compete recoupment seems unlikely given the uncertain nature of the dispute process. Therefore, we need to estimate the share of double discounts that can be expected to be recovered once ESP is utilized to its full potential.

The proportion of double discounts that can be recovered D can be modeled as the product of $I =$ the percent of double discounts identified and $R =$ the rate of recoupment for those that are identified. We are interested in the change in D from before to after the implementation of Second Sight's platforms. Let period 0 represent "before" and 1 represent "after". Therefore, we have

$$D_1 - D_0 = I_1 * R_1 - I_0 * R_0 \quad (1).$$

Since estimates of the four parameters on the right-hand-side of the equation are difficult to find, simplifying assumptions are required. First, note that ESP is explicitly designed to obtain all information necessary to identify all types of double discounting, and the Eli Lilly quote above claims that it is very successful in doing so. Therefore, it is reasonable to assume a very high identification rate. Accordingly, I set $I_1 = 0.9$ (90%).

Although there are no known estimates of the rate at which drug manufacturers successfully recovered money lost to double discounting prior to ESP, there are reasons to suspect that it is relatively low. The fact that different parties manage the 340B and Medicaid systems can make it challenging for manufacturers to identify instances of duplicate discounting unless they utilize third-party platforms to link the two data sources (Singh, 2023). Once suspected instances are identified, reaching a resolution is not straightforward. Over 70% of Medicaid beneficiaries are on managed care, and Mirga (2023) describes it as "unorthodox" and "pushing the boundaries" to request repayment from covered entities for drugs dispensed to those patients, as covered entities only bear responsibility for fee-for-service Medicaid. Recoupment from the Medicaid Drug Rebate Program is possible via the "Dispute Code" on the Medicaid's Drug Rebate Prior Quarter Adjustment Statement form, but no data are available on how frequently this is done (Centers for Medicare and Medicaid Services, 2023). Manufacturers have the right to file a dispute with HRSA if a private agreement with covered entities or Medicaid is not reached, but they do not appear to have ever successfully done so. In 2024, HRSA finalized a new dispute resolution process that replaced an earlier version that the agency deemed unworkable and that never adjudicated a single claim (HRSA, 2025b). However, as of March 2026, the new process had only resulted in a handful of decisions – none related to double discounting (HRSA, 2026).

For these reasons, it is reasonable to assume relatively low rates of pre-ESP identification (I_0) and recoupment conditional on identification (R_0). I therefore assume that $I_0 * R_0 = 0.1$, meaning that only 10% of revenue lost to double discounting was recovered. Calibrating the product of the two parameters allows for more flexibility than calibrating each of them

separately. $I_0 * R_0 = 0.1$ is consistent with $I_0 = 0.5$ and $R_0 = 0.2$, the reverse, both being 0.315, and numerous other plausible combinations of values.

There is no obvious way to calibrate R_1, the recoupment rate for identified double discounts under full utilization of ESP. Since identifying double discounting is a matter of matching ID numbers from different sources, adjudication should be more straightforward than other types of fraud cases. I therefore assume a relatively high recoupment rate (conditional on identification) of $R_1 = 0.67$.

After making these assumptions, equation (1) becomes

$$D_1 - D_0 = 0.9 * 0.67 - 0.1 = 0.503.$$

Multiplying this by $3.09 billion yields *a value to pharmaceutical manufacturers from reduced double discounting of $1.57 billion*.

Table 2 explores the sensitivity of this estimate to using plausible higher and lower values of each of the parameters for which calibration was the most arbitrary. These are the rates of duplicate discounting for Medicaid managed care (*DMC*) and fee-for-service Medicaid (*DF*) among covered entities with any duplicate discounting, the double-discounting identification rate under full utilization of ESP (I_1), the recovery rate for revenue lost to double discounting prior to ESP ($I_0 * R_0$), and the recoupment rate conditional on identification (R_1). The first row, in bold, shows the results from my preferred calibration, while the others use alternate parameter values. The next two rows vary the duplicate-discounting rates for the two types of Medicaid to be higher and lower, respectively, while keeping other parameter values the same. The next two rows use higher and lower I_1, the next two use higher and lower $I_0 * R_0$, and the final two use higher and lower R_1. As the table shows, the range of estimates is from $1.08 billion to $2.14

billion. Therefore, even under conservative assumptions, the value to drug companies is over $1 billion.

Table 2 – Sensitivity Analyses of Value to Manufacturers from Reduced Duplicate Discounting

DMC	DF	I_1	$I_0 * R_0$	R_1	Value
0.5	0.25	0.9	0.1	0.67	$1.57 billion
0.75	0.5	0.9	0.1	0.67	$2.14 billion
0.25	0.1	0.9	0.1	0.67	$1.08 billion
0.5	0.25	1	0.1	0.67	$1.78 billion
0.5	0.25	0.75	0.1	0.67	$1.26 billion
0.5	0.25	0.9	0.2	0.67	$1.26 billion
0.5	0.25	0.9	0	0.67	$1.88 billion
0.5	0.25	0.9	0.1	0.75	$1.80 billion
0.5	0.25	0.9	0.1	0.5	$1.10 billion

As an aside, readers familiar with IQVIA's claims of annual double discounting amounts of $20 to $25 billion (Greenwalt, 2022) and subsequently $34 to $37.5 billion (Singh, 2023) might be surprised that I estimated a much lower $3.13 billion. First, note that those estimates are based on wholesale acquisition cost pricing, which inflates amounts compared to the actual 340B prices used by HRSA. To illustrate, HRSA computed the total size of the 340B program to be $66.3 billion in 2023 (Fein, 2024), while IQVIA computed $124 billion in the same year (Martin and Karne, 2024). Scaling Singh's (2023) numbers accordingly yields $18.2 to $20.1 billion. Therefore, IQVIA's different pricing method alone accounts for almost half of the difference between my estimates and theirs.

Additionally, IQVIA's claims use vague wording that gives the appearance of being carefully chosen to exaggerate the amount of duplicate discounting. Greenwalt (2022) writes "$20-25 billion in duplicate discounts that *may not have been owed*," while Singh (2023) states "$34.0B to $37.5B of sales … *may be at risk* for IRA/340B duplicate discounts" (italics added). The use of the word "may" implies a ceiling rather than an exact number. Normally, one would

review the methodologies behind these numbers to determine more precisely what "may" means, but unfortunately the white papers in which the estimates originated – which are presumably where the methodologies are described – do not appear to be publicly available. Greenwalt (2022) does not provide any source at all for his $20 to $25 billion claim. The link provided by Singh (2023) to support his $34 to $37 billion claim leads to only a one-paragraph summary of the white paper plus a link to a "fact sheet", which contains only a single paragraph plus a link to the "full report" in the "white paper", which instead redirects back to the first page.

Regardless, it is straightforward to see that these enormous estimates are implausible. As Nguyen and Suresh (2024) state, IQVIA's estimates imply that about 25% of the entire 340B program is duplicate discounting. However, this is at odds with the government audits discussed above that find that 24% of covered entities engaged in *any* duplicate discounting. *All* of the 340B revenues at these 24% of covered entities would have to represent duplicate discounting in order to add up to roughly a quarter of the overall size of the program. This is impossible because in order for there to be a second discount, there would have to be a legitimate first discount. Even if this were possible, the *entire* patient base at these covered entities would have to be on Medicaid in order for all prescription fills to be candidates for duplicate discounting. Even if it were, one would still have to assume that *all* Medicaid fills were duplicate discounted, including those for fee-for-service.

B. Denial of Valid Claims

One possible source of value of Second Sight's data platforms to drug manufacturers is that the company's conflict of interest has the potential to lead to 340B discounts not being received even when they are appropriate. This is especially likely with the rebate model implemented in Beacon, which effectively switches the default from the 340B discount being

granted to not being granted. This would be true of any rebate model, but it is especially concerning when a company connected to the pharmaceutical industry is in control of deciding when the burden of proof has been met that a covered entity qualifies for a rebate.

Valid claims could go unpaid in three distinct ways. The first is through software problems and glitches, which are common when rolling out elaborate new data management systems. The widely known problems with the implementation of the Affordable Care Act's Marketplace platform in 2014 provide a prominent example. However, Second Sight's conflict of interest amplifies the concern in this case, as the company is incentivized to fix glitches slowly and ineffectively if it means 340B discounts will be delayed or denied or that some covered entities will be deterred from submitting claims.

The second way is through the imposition of burdensome administrative requirements, which could deter covered entities and pharmacies from submitting claims, perhaps prevent some from participating in the 340B program at all, or lead to mistakes that result in claims not being processed correctly. To illustrate the latter point, the appendix table shows that no fewer than *twelve* distinct identification numbers are required in a claim submission, making the odds quite high that mistakes will occur in a meaningful number of cases. It is unclear what sort of technical support will be offered by Second Sight to help correct claims when there are mistakes. However, again, the company's affiliation with pharmaceutical manufacturers creates an incentive for the support to be minimal so that the hassle cost for covered entities and pharmacies becomes too high to pursue correction.

The other way valid 340B discounts might not be received is through intentional strategies designed to reject as many claims as possible. Again, Second Sight is not a neutral arbiter. Just as insurance companies are incentivized to find as many ways as possible to reject

patients' medical claims, drug companies are incentivized to do the same for 340B claims. Their ability to do so would increase exponentially in a rebate model.

As stated in the Terms of Use, the ESP system is used "for the purpose of identifying Ineligible Rebates **and evaluating compliance with Participating Pharmaceutical Manufacturer policies**" (emphasis added). The latter phrase makes clear that the goal is not only to identify rebates that are ineligible according to the law (duplicate discounting), *but also according to rules established unilaterally by the manufacturer that reach well beyond the text of the law* (other double discounts). These rules create the potential for claims that are valid according to the law but invalid according to manufacturer rules. The ESP and Beacon portals provide vehicles for imposing these rules by creating algorithms to automate claim evaluations for rebate denial.

The enormity of the 340B program means that the value to drug companies from being able to deter or refuse even a relatively small fraction of legally valid claims would likely reach billions of dollars. While it is impossible to quantify all the various ways discussed above in which valid claims may end up not being paid, a rough estimate can be obtained by drawing a parallel with the health insurance industry. In the same way that insurers benefit from claim denials and yet are the ones making those decisions, drug companies benefit from 340B claim denials with Second Sight (with its extensive ties to pharmaceutical groups) making those decisions.

A study by Kaiser Family Foundation used ACA Marketplace data to determine that insurers denied 19% of all claims (Long et al., 2026). Lin et al. (2025) find that, when claims denials receive independent medical review, around half are overturned. Of course, those that proceed to independent medical review are likely those denied for medical reasons. However,

according to Long et al. (2026), only 5% of in-network claim denials were for that reason. Of the other reasons listed by the study "services excluded" (13%), "member not covered" (7%), and "enrollee benefit limit reached" (5%) appear legitimate. However, the two most frequent reasons for claim denials – "other reason" (36%) and "administrative reason" (25%) – likely largely reflect the sort of bureaucratic, administrative, and technological issues discussed as possible sources of improper denials in ESP. For purposes of this analysis, I assume that half of "medical reason" denials, all "administrative reason" denials, and half of "other reason" denials (given the ambiguity in that category) are improper. These percentages sum to 45.5%. Since 19% of claims are denied, the percentage of total claims that are improperly denied is the product of these two percentages, which is 8.6%.

Assume the same improper claim denial percentage applies to 340B ESP, and the percentage of claims is the same as the percentage of costs. With a total 340B program size of $81.4 billion, *the dollar amount of improper claim denials comes to $7 billion*. This represents not only a benefit to pharmaceutical manufacturers but also a direct cost to covered entities.

C. Lobbying Policymakers

The pharmaceutical and health product industry spent $4.7 billion on lobbying at the federal level alone between 1999 and 2018. The effectiveness of this lobbying in obtaining more favorable outcomes is well-documented. For instance, Unsal (2016) finds that politically connected firms achieve more medical breakthroughs and receive more government subsidies. Rayfield and Unsal (2019) and Zhou (2023) show that lobbying firms receive less severe recall classifications, with the former also documenting increased product approvals. Lee and Freixanet (2023) find that higher lobbying expenditures are associated with increased annual revenue

Garlick (2025) shows that legislative outcomes are more likely to favor the pharmaceutical industry in jurisdictions with higher lobbying activity.

Data from Second Sight's 340B data platforms have the potential to provide the pharmaceutical industry with valuable new ammunition in its lobbying efforts. Section 3 of the 340B ESP Terms of Use gives Second Sight considerable latitude with how it can utilize the data for purposes beyond simply checking for double discounting (emphasis added):

> ***You grant Second Sight a worldwide, sublicensable, non-exclusive, royalty-free, perpetual, irrevocable license to collect, process, disclose, create derivative works of and otherwise use the Covered Entity Claims Data*** *("Data License") for the purposes set forth herein, including specifically pursuant to Sections 3.4 and 3.5, and represent and warrant that you are authorized to grant such Data License on behalf of the Covered Entity* (340B ESP, 2024).

Therefore, Second Sight retains the right to sublicense the data and create and sell derivative products at their sole discretion without owing covered entities any compensation. Given the conflict of interest discussed in Section II, it is reasonable to assume that the "derivative works" will be created in a way that spins the data to the benefit of pharmaceutical manufacturers.

Who will Second Sight likely sublicense the data to? As further stated in the terms of use (emphasis added):

> *You agree that Second Sight may disclose and sub-license the Covered Entity Claims Data and any other data derived from the interpretation, analysis, and combination of the foregoing data with other data (the "Covered Entity Platform Data") to the* ***Participating Pharmaceutical Manufacturers, commercial payers, rebate claims processors or state Medicaid agencies*** *under the same Terms as applicable to us for the*

purpose of identifying Ineligible Rebates and evaluating compliance with Participating Pharmaceutical Manufacturer policies (340B ESP, 2024).

This language provides a reasonable suspicion to believe that "derivative works" will be distributed to drug companies to use for lobbying purposes and also to insurers, claims processors, and Medicaid agencies in order to influence their decisions in favor of manufacturers.

A recent development illustrates this possibility. On April 8, 2026, AbbVie sued HRSA in an attempt to impose its own 340B patient definition (Court Listener, 2026). Almost immediately afterwards, Berkeley Research Group released a PhRMA-funded white paper on patient definitions using claims data (Blalock, 2026). This paper is an updated version of a report that Blalock co-authored with Aaron Vandervelde, the founder of Second Sight (Vandervelde et al., 2023). Given Berkeley Research Group's and Second Sight's connections to the pharmaceutical industry, it is not a stretch to anticipate similar real-time "derivative works" using ESP and Beacon data to be released for the purpose of supporting the industry's position in ongoing legal cases or policy debates.

Another aspect of Section 3 of the Terms of Use that reveals motives beyond simply error correction is that Second Sight intends to keep the claims information indefinitely, long after its usefulness for identifying double discounting ends:

> ***This Data License survives after termination of the Agreement and shall survive*** *as to any Covered Entity Claims Data that you have submitted on behalf of the Covered Entity or that a TPA (as defined herein) has submitted on behalf of the Covered Entity* ***after such respective dates of submission*** (340B ESP, 2024).

If the sole purpose of the information provided is to identify double discounting and other violations, then it is of no value once claims are determined to be either valid or invalid. Why then would the terms of use make explicitly clear that the data can be retained indefinitely? Clearly the data have other sources of value. One of these may be maintaining the ability to prepare derivative products using data from as far back as necessary to paint drug companies in a positive light and covered entities in a negative light.

It is, of course, common in any policy debate for both sides to emphasize the statistics that are most favorable to their point of view, but generally the playing field is level in the sense that the two sides have access to the same underlying information from which they can develop their arguments. The asymmetric data ownership structure imposed by ESP gives Second Sight – whose parent company drug manufacturers financially support – the ability to generate statistics that might be misleading, without covered entities having the ability to access the same data to refute these statistics or provide context. This is because covered entities will only have access to their own data, not to the universe of data from all covered entities owned by Second Sight.

Beyond influencing government policy, covered-entity-provided 340B and Beacon data may also enable the pharmaceutical industry to lobby insurers for favorable formulary inclusion and reimbursement decisions. Claims-derived data on utilization help the industry build pharmacoeconomic models that support inclusion and ensure the real-world representativeness of the analyses used in reimbursement policy (Levine and LeLorier, 2012). Nineteen of 20 industry scientists surveyed by Olson et al. (2003) reported that models had played a role in optimizing the formulary positioning of their products. Section 114 of the 1997 Food and Drug Administration Modernization Act enables drug manufacturers to promote their drugs to

formulary decisionmakers, and data-driven promotional materials can be helpful tools to do so (Neumann et al., 2011).

While estimated rates of return of lobbying expenditures in the pharmaceutical industry are scarce, one recent example is suggestive of the potential impacts. Poulos (2026) writes that $150 million in industry lobbying in 2025 helped secure $8.8 billion in savings over the next decade ($880 million per year) through rollbacks of drug price negotiation provisions in the One Big Beautiful Bill (OBBB). This implies $730 million in net profits annually per $150 million in expenditures, or a rate of return of 487%. For a program the size of 340B ($81.4 billion per year), any federal legislative victories enabled by ESP/Beacon data would likely increase industry revenue by billions of dollars. Victories at the state level would likely mean millions.

To provide a rough estimate of the potential lobbying value of covered-entity-provided ESP/Beacon data, suppose these data create a 20% change of a favorable change in federal legislation of the same magnitude of the OBBB victory ($880 million annually). This yields an expected value of $176 million. Suppose they also enable a 20% chance of legislative victory in each state that is 1/50 of $880 million, or $17.6 million. In expectation, ten states would enact such legislation, making the overall expected value another $176 million. Therefore, *the total expected value including both state and federal legislation would be $352 million*. While one might argue for a lower probability than 20%, one could also argue that major legislative wins would be much larger than $880 million given the 340B program's size. Also, this analysis ignores any possible value from improved odds of formulary inclusion.

D. Physician Targeting

Drug companies also direct significant lobbying efforts towards physicians – a practice known as detailing. Although direct kickbacks from drug companies to physicians based on

prescribing rates are prohibited, manufacturers can still leverage gifts, speaking and consulting fees, research funding, and even ownership interests to exert indirect influence (McCabe Law Firm, 2026). The Physician Payments Sunshine Act, enacted as part of the Affordable Care Act in 2010, required disclosure of industry payments to physicians. However, the CMS Final Rule created significant loopholes, exempting payments for meals at large gatherings, indirect payments for accredited CME programs, drug samples, and discounts or rebates (Lichter, 2015).

Direct outreach to physicians is an effective way to boost sales. For instance, In Washington, DC, receiving gifts from pharmaceutical companies led physicians to write more prescriptions, more costly prescriptions, and more branded prescriptions (Roehr, 2017). Brunt (2018) finds that transfers from drug companies to physicians increase prescription costs and the rate of prescribing branded and high-risk drugs. Mehta et al. (2020) shows that payments to physicians increase Pimavanserin prescriptions and Medicare expenditures. Duarte-Garcia et al. (2022) document that payments to rheumatologists increase prescribing probability and Medicare spending.

Physician-identifying prescription data, which includes the prescriber's name, the drug prescribed, the dose, and prescribing patterns over time, are widely used by pharmaceutical companies to enhance the effectiveness of their outreach efforts (Greene, 2007). Health information organizations (HIOs) purchase de-identified patient prescription records from pharmacies and link them to comprehensive physician databases — such as those sold by the American Medical Association — to construct prescriber profiles at the individual level (Fugh-Berman, 2008). These profiles can segment physicians by prescribing volume, specialty, receptivity to marketing, and early versus late adoption of new drugs (Gostin, 2012). These data, along with data from pharmacies and medical practices, enable pharmaceutical companies to

tailor sales pitches and marketing strategies to individual physicians (Fugh-Berman, 2008). Data-enabled prescriber profiling improves profit margins by up to 3 percentage points and initial drug uptake by 30% (Grande, 2007).

The pharmaceutical industry has devoted considerable resources to protecting its ability to obtain and utilize physician data, demonstrating a belief in the value of these data. For instance, when New Hampshire became the first state to prohibit the sale of prescriber information for pharmaceutical sales and marketing purposes in 2006, HIOs challenged the law on commercial free speech grounds (Grande, 2007). A similar argument was made when a 2011 Supreme Court decision – Sorrell v. IMS Health – struck down a Vermont statute requiring pharmacies to obtain prescriber consent before releasing prescriber-identifying information to data miners (Zimmerman, 2020). The AMA created the Prescribing Data Restriction Program (PDRP) as a compromise, allowing physicians to opt out of having their prescribing data made available to sales representatives. However, fewer than 2% of US physicians registered (Fugh-Berman, 2008).

Second Sight's platforms provide a valuable new source of physician data that have the potential to enhance the effectiveness of drug manufacturers' physician targeting efforts. This is enabled by the inclusion of the prescriber's linkable ID code as a claim submission field (340B ESP, 2026). The FAQ only promises that RX number and serialization are de-identified, implying that physician identifiers remain. Since physician identifiers are not necessary to identify improper claims, *not* de-identifying these providers suggests an additional motive.

Information on prescribing physicians and pharmacies would be of enormous value to drug companies. For instance, they would be able to identify high-340B-volume physicians and pharmacies and target them through either direct outreach or changes to rules and regulations.

Given pharmaceutical companies' expertise in deploying sales representatives to influence the prescribing behavior of physicians, it is not hard to envision them developing similarly effective methods of influencing 340B volume.

On a larger scale, drug companies could use ESP data with physician and pharmacy identifiers to conduct market research by implementing certain types of outreach for certain physicians or pharmacies on a randomized basis to determine which approaches are most effective. A study by Carey et al. (2021) finds that the return on investment for pharmaceutical sales visits and payments to physicians could be over 400%. With ESP data, it would be easy for drug companies to conduct similar types of analyses that are specific to 340B.

Furthermore, "sticks" could be used in addition to "carrots". Prescribers could be vulnerable to potential retaliation if their prescribing practices are viewed as problematic because they are associated with a covered entity with poor drug purchasing habits. There does not appear to be anything stopping a manufacturer from using the data it sees on specific prescribers and pharmacies to alter its 340B distribution policy and form additional rules about distribution based on acceptable levels of prohibited incidents.

Of the empirical studies mentioned earlier in this section, Mehta et al. (2020) presents results in a form that is particularly useful for projecting the possible value of 340B-data-enhanced physician targeting efforts. Among other findings, they report that every $100 in physician payments increased Medicare Pimavanserin expenditures by $175.84 – a 76% return on investment. King and Berman (2013) report that the pharmaceutical industry spent $15.7 billion on physician detailing in 2011. Adjusting for inflation using Consumer Price Index data from the Bureau of Labor Statistics, that amount becomes $22.48 billion in 2025$. A 76% return on investment implies an increase in revenue of $39.56 billion. Suppose, conservatively, that

covered-entity-provided 340B data in Second Sight's platforms increases the effectiveness of detailing efforts by 5%. The revenue would grow to $41.54 billion – an increase of $1.98 billion. Therefore, improved physician targeting efforts represent another important source of value.

E. Individual Claims Data

Data on individual transactions could potentially provide additional value over and above the physician- and facility-level information they convey. Patient-level data enables drug companies to learn more about their customers and the markets for their products. Companies across numerous industries routinely purchase data on customers or potential customers that can provide a strategic business advantage. As shown in the appendix tables listing the information collected by ESP and Beacon, little patient-level data will be collected. Patients are de-identified, and no information on demographic characteristics, diagnoses, or health histories is recorded. However, given the broad licensing terms for the 340B ESP and Beacon platforms, manufacturers could conceivably link the data that they receive to other datasets they maintain using an identifier such as the prescription number.

Although individual claims data in this case therefore cannot be used in isolation to understand the individual, they could nonetheless be used for several valuable purposes. These include, for instance, understanding geographic patterns of utilization, whether 340B drugs are filled at in-house or contract pharmacies, how many contract pharmacies are utilized by patients of particular facilities, how far away the contract pharmacies are, and which facilities have the highest double discounting rates. While these sources of value are potentially important, they have likely already been captured to some extent by the categories already discussed, particularly duplicate discounting, lobbying, and physician targeting. I therefore err on the side of caution and do not claim additional value here. That is, the data provided by covered entities is clearly

valuable in the aggregate, and the value of any individual claim derives from the manner in which a manufacturer uses it.

F. Sublicensing of Data

Second Sight retains the right to sublicense the data at its sole discretion. There would be considerable demand among both researchers and businesses for such detailed pharmaceutical claims data. If the Second Sight data platforms are fully utilized to cover the universe of 340B prescriptions, they would have a substantial advantage over other datasets in terms of size, which in turn gives them a wider variety of uses in academic and business research. The only administrative prescription drug dataset of comparable size would be Medicare claims data, which is limited by only having Medicare patients. If the Second Sight dataset were to be made available, the company could expect a wave of scholarly researchers writing grants to government agencies and private foundations in order to fund its purchase. This would, in turn, enable the dataset to be sublicensed for a substantial fee, likely in the five-figure range. Businesses across the health-care industry and beyond would also likely be willing to pay similar amounts for the purpose of market research. This could either take the form of sublicensing the data for their own internal staff to analyze or contracting with Second Sight staff for customized research reports.

To estimate the value of such opportunities, I consider another private company that sells extensive health care claims data – albeit with a somewhat different scope – and prepares customized reports: Trilliant Health (Trilliant Health, 2026). Although the company is private and therefore does not release public financial reports, its annual revenue is estimated at *$11.8 million* (Bitscale, 2026). Therefore, while the ability to sublicense data or sell data reports to

scholarly researchers or other businesses provides tangible value to Second Sight, this value is likely much smaller than the other sources discussed previously.

IV. Discussion and Conclusion

This report argues that drug manufacturers are unilaterally forcing covered entities to hand over *valuable* information *without compensation* by *threatening to withhold* the 340B discount that is mandated by law. This could be argued to meet the legal definition of extortion: "the wrongful use of actual or threatened force, violence, or intimidation to gain money or property from an individual or entity" (Chen, 2026). Even further, much of the value of the information comes from the ability to harm these same covered entities through claim denials or lobbying advantages. Moreover, ESP reporting requirements impose substantial administrative burdens on covered entities and pharmacies. In effect, then, the more accurate statement would be that these entities are actually being forced to provide valuable information *with negative compensation*.

If fully implemented, the value from covered-entity-provided information being collected by the drug-industry-connected portals ESP and Beacon can be expected to take several forms. One of these is the stated objective of curbing double discounting, which I estimate to have an annual value of $1.57 billion. However, the other sources of value – which are not acknowledged by manufacturers – appear to be much more substantial. First, I estimate the ability to avoid paying valid claims to have a value of $7 billion if a rebate model is approved. Second, the opportunity to create derivative data products to use for lobbying purposes has an estimated $352 million value. Next, I estimate $1.98 billion in value from using the data to better target and influence physician prescribing decisions. Finally, a modest additional value of $11.8 million comes from the ability to sell access to the data to researchers in both industry and academia.

Combined, these other sources of value add up to $9.33 billion per year – almost three times the *total* amount of double discounting, which I estimate to be $3.13 billion, and over 11% of the size of the entire 340B program.

Of course, predicting the impacts of events that have not yet occurred requires a number of strong assumptions, such as that the frequency of denials of valid claims will mirror that of the health insurance industry. Therefore, my estimates should be interpreted as illustrations of potential magnitudes rather than exact forecasts. Nonetheless, the fact that the estimated "other" sources of value add up to be *so* much greater than the estimated value from reducing double discounting is strongly suggestive of additional motivations on the part of drug manufacturers.

Recent anecdotal evidence provides further support for the hypothesis that the true motive of the pharmaceutical industry is to reduce the financial burden from the 340B program through by any means possible, rather than merely identifying and eliminating errors. First, manufacturers' attacks on the program extend far beyond the data platforms and rebate model emphasized in this report. 40 drug companies have imposed distribution limitations, which typically involve attempting to shrink covered entities' networks of contract pharmacies (Kodiak, 2026). HRSA responded by sending letters informing manufacturers that these actions violated the 340B statute. This led to lawsuits challenging HRSA's authority to issue these letters, which in turn led to 20 states passing legislation to protect covered entities and contract pharmacy arrangements, which in turn led to dozens of additional lawsuits challenging these state laws. Duplicate discounting is again given as a justification for these restrictions and lawsuits (Congress.gov, 2025; Moldwater et al., 2025). However, the scale of these efforts seems disproportionate to the relatively modest amount of money lost to duplicate discounting. The far

more obvious benefit to manufacturers is simply lowering the share of 340B-eligible drugs that are filled at contract pharmacies, thereby reducing the share of drugs given the discount.

Additionally, covered entities' experience with Second Sight's platforms thus far is consistent with the concern expressed in Sections I and IIIA about the company's conflict of interest leading to denial of valid claims and lengthy administrative delays in getting issues resolved. For instance, when manufacturers turned off 340B pricing until covered entities registered with ESP, covered entities reported significant problems and delays with getting 340B pricing restored after registration. This led provider groups to allege that the real purpose of the platform is to undermine the 340B program and to call for the passage of the 340B Protect Act, which would require HRSA to appoint a neutral third party to oversee the claims clearinghouse (True, 2022).

More recently, problems have arisen with the implementation of the Inflation Reduction Act's Maximum Fair Price (MFP) refunds for the ten drugs used in Medicare Part D's pilot program for price negotiations. Manufacturers have been requiring the use of a Beacon spin-off product – Beacon MFP – to communicate with 340B covered entities regarding MFP refunds (Beacon Channel Management, 2025). According to a letter to the Centers for Medicare and Medicaid Services (CMS) from the President and CEO of America's Essential Hospitals Jennifer DeCubellis, some manufacturers are denying refund claims via Beacon MFP because they erroneously believe that the claim was already replenished by 340B. This is being done on the basis of proxy information rather than confirmed claim-level 340B status – a practice prohibited by CMS in its Medicare Drug Price Negotiation Program final guidance. When covered entities dispute these denials, they are prompted to submit supporting documentation through ESP, which is a new platform for covered entities in states where mandating its use for 340B claims is

prohibited (DeCubellis, 2026). This is in spite of the fact that, according to manufacturers, Beacon MFP has the capability to handle the submission of documentation (AstraZeneca, 2025; Novo Nordisk, 2025). The resulting administrative burden imposed on covered entities is substantial, and refunds can be delayed indefinitely, causing liquidity issues for some hospitals (DeCubellis, 2026). In contrast to this convoluted and time-consuming process for correcting errors that were originally made in favor of manufacturers, Beacon MFP offers a simple, streamlined process for errors originally made in favor of covered entities (Johnson & Johnson, 2026).

It is important to note that platforms that are genuinely third-party already exist that have been used by manufacturers to identify duplicate discounts (Singh, 2023). To provide one example, Kalderos, founded in 2016, states that they have helped with 70,000 Medicaid Drug Rebate Program claims (2026). This calls into question whether the reason manufacturers chose to require the utilization of Second Sight's platforms as opposed to others is because of the company's connection to the drug industry.

In short, I conclude based on the available evidence that pharmaceutical manufacturers' requiring use of industry-connected data platforms and lobbying for a rebate model are part of a broader effort to shrink the size of the 340B program by as much as possible using all available means. Correcting errors such as double discounting is given as the justification, but this represents a relatively small amount of the financial benefits manufacturers stand to gain. These efforts should come as no surprise, as for-profit companies' objective is to maximize profits, and industry lobbying organizations exist to help them achieve that objective. Accordingly, the federal government should step into the role of neutral referee rather than trusting that data

platforms developed by a company with extensive ties to the drug industry will serve that purpose.

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Appendix Table 1 – Data Collected by ESP

Field	Data Type	Description
Contracted Entity ID*	Alpha numeric ID that may contain dashes--starts with 2 or 3 letters	The 340B ID of the covered entity where the prescription originated. If the 340B ID contains a suffix, this must be included.
Date of Service*	Standard Date Formats	The date the patient filled their prescription. Please include only the date, as time stamps will flag an error.
Date Prescribed*	Standard Date Formats	The date the prescriber wrote the prescription. Please include only the date, as time stamps will flag an error
NDC*	Numeric, 11 digits, may contain up to 4 leading zeros	The 11-digit National Drug Code which indicates the manufacturer, product, and commercial package size - note that this field must have 11 digits so please include zero padding.
Prescriber ID**	Numeric, 10 digits, never starts with a leading zero	The unique public ID for the prescribing physician. Accepted IDs include the NPI and DEA ID.
Prescriber ID Qualifier**	Numeric	Indicates the type of unique ID provided. A value of "01" indicates NPI, "12" indicates DEA.
Quantity*	Numeric	The number of units in the prescription.
Rx Number*	Numeric, may contain leading zeros	The native (unmodified) prescription number for the prescription as generated by the pharmacy.
Service Provider ID*	Numeric, 10 digits, never starts with a leading zero	The unique public ID for the dispensing pharmacy. Accepted IDs include the NPI, DEA, NCPDP, and Medicaid ID.
Service Provider ID Qualifier**	Numeric	The type of unique ID provider. "01" for NPI, "05" for Medicaid, "07" for NCPDP, and "12" for DEA.
Wholesaler Invoice Number	Numeric	The invoice number assigned by the wholesaler for the replenishment order made by the 340B covered entity. If the

		claim relates to multiple wholesaler invoices, all invoice numbers should be reported, delimited by commas.
Payer BIN**	Alpha numeric, may contain leading zeros	The bank identification number of the primary payer on the prescription.
Payer PCN**	Alpha numeric, may contain leading zeros	Processor Control Number. Identifier used to determine which processor will handle a prescription drug claim.
Ship to Date	Standard Date Formats	Date when the drug was shipped to the Ship To location.
Ship to Location	Numeric	NPI, DEA, or NCPDP of the pharmacy where the drug was physically shipped.
340B Account Number	Alpha numeric	Account number assigned by the wholesaler and used for the purchase.
Product Serialization Number	Numeric	Unique ID assigned to the package shipped from the manufacturer to the wholesaler.
Fill Number	Numeric	Indicates the number of times the prescription has been filled as of the current fill. For example, a value of 2 indicates that the prescription has been filled twice and the current fill is the second one.

**Indicates a required field for all 340B ESP™ submissions regardless of NDC.*
***Indicates a field that may be required depending on the manufacturer. Please review the manufacturer policies in the Resources page to learn more.*

"**What data elements are deidentified in 340B ESP?**
The Rx Number and Product Serialization number are de-identified through a HIPAA compliant hashing process known as SHA-3 hashing. An additional layer of security called a "salt" is applied prior to any data being uploaded to 340B ESP™. This process was granted an Expert Determination indicating that it meets the definition of a De-Identified Data Set under HIPAA and does not contain PHI. Additional information on this expert determination may be requested by contacting us."

The policies on 340B ESP suggest that at least Exelixis, Bristol Myers Squibb, and Gilead will require that prescriber ID be submitted, and more broadly, the dispensing pharmacy is a required submission for all claims.

Appendix Table 2 – Data Collected by Beacon

Field	Data Type	Description
340B ID*	Alpha/Numeric	The unique identification number provided by HRSA to the 340B covered entity.
Date Prescribed*	Standard date formats	Date the prescriber wrote the prescription.
Date of Service*	Standard date formats	Date on which the pharmacy filled the prescription.
Rx Number*	Numeric	The native (unmodified) prescription number for the prescription as generated by the pharmacy.
Fill Number*	Numeric - 0-99	Indicates the number of times a prescription has been filled.
NDC-11*	Numeric - 11 digits	The 11-digit National Drug Code which indicates the manufacturer, product, and the commercial package size.
Quantity Dispensed*	Numeric	The number of units dispensed to the patient.
Prescriber ID*	Numeric - 10 digits	National provider identifier (NPI) of the physician that wrote the prescription.
Service Provider ID*	Numeric - 10 digits	NPI of the pharmacy that filled the prescription.
Rx Bin*	Numeric - 6 digits	Prescription Drug Bank Identification Number. Enables pharmacies to electronically transmit data to the appropriate PBM for processing and reimbursement. Include BIN for the primary payer on the claim. If patient is uninsured or a cash payer, mark “999999” in this field.
Rx PCN*	Alpha/Numeric	Processor Control Number. Identifier used to determine which processor will handle a prescription drug claim. Include PCN for the primary payer on the claim. If patient is uninsured or a cash payer, mark “CASH” in this field. If there is no PCN, mark “NONE” in this field.

Indicates a required field

“**What data is de-identified for claims submissions?**
Rx number, product serialization number and claim number are deidentified. This process was granted an Expert Determination and meets the definition of a De-Identified Data Set under HIPAA.”