Elsevier / Gold Standard: 
Drug Price Types and Options 
for a Future Standard
Standardized price information is a vital part of the drug purchasing and reimbursement system. This white paper will survey the current state of drug pricing, including Average Wholesale Price, provide details about the most important pricing standards, and explain why the new Predictive Acquisition Cost (PAC) standard could serve as the long-term drug pricing reimbursement benchmark.

The Evolution of Drug Pricing and Average Wholesale Price

Thanks to an astonishingly productive period in the research and development of pharmaceuticals during the second half of the 20th century, drugs became an essential component of medical treatment and a major health insurance benefit. The processes of providing and paying for patients’ prescription drugs became more complex as employers and health insurance plans sought to maximize benefits while minimizing costs, and manufacturers worked to expand market share and profits. PBMs emerged to assist payers with reducing costs and wholesalers formed to purchase at volume discounts from manufacturers and distribute to pharmacies.

The reimbursement system and flow of drug purchases and rebates between employers and insurers, PBMs, drug manufacturers, wholesalers, retail pharmacies and consumers is complex as the following figure shows:
Computer technology advanced even more rapidly than pharmaceuticals, allowing for greater automation and electronic processing of prescriptions and claims adjudication. The sheer volume of transactions combined with the number of players involved with getting drugs to consumers required agreement on what drug price to use for each drug in negotiating contracts and adjudicating claims. Almost by default, the industry settled on the average wholesale price (AWP), developed by George Penebaker to adjudicate claims and establish proper drug reimbursement for the California Medicaid Drug Program (called Medi-Cal) in the 1970s. As we’ll see in more detail in the next section, AWP has been an imperfect standard, varying from true acquisition cost by a wide range. As early as the 1980s AWP has been jokingly referred to as “ain’t what’s paid.” Nevertheless, it has been the commonly accepted starting point to determine reimbursements and contract purchase price. For example, a contract might state that payment be the usual and customary, but no more than AWP minus 15%, or the estimated acquisition cost, but no more than AWP minus 10%.

The Current State of Drug Pricing

Criticism of AWP is not confined to its failure to represent a true average. More strenuous complaints have been directed at how easily AWP can be manipulated. This assertion ultimately led to a Medicare Part B fraud investigation and a lawsuit against First DataBank (FDB), the original publisher of AWP, and Medispan from Wolters Kluwer, another publisher of AWP. Medicare Part B primarily covers physician-administered drugs. The investigation focused on whether AWP was being used to bill Medicare for more than the actual cost of drugs. AWP was being used to calculate claims and the charge was made that the price was being artificially manipulated to ensure higher reimbursements. In 2005, the Prescription Access Litigation (PAL) project claimed there was a conspiracy to increase AWP for these purposes. As a result, FDB ceased publishing AWP in its drug price data.

Because FDB is commonly used for price data, the looming, and now actual, absence of AWP from its price file sparked debate about a new price benchmark to replace it. As imperfect as AWP is, it is still the standard upon which many contracts and claims depend. Until a new standard is found, the majority of payers, PBMs, retailers, manufacturers and wholesalers will continue to rely on AWP. Although AWP has been withdrawn from FDB, both reported and calculated AWP are included with complete transparency in the Gold Standard Drug Database from Elsevier.
The Search for a New Drug Price Benchmark

Industry leaders and advocates have proposed various alternatives to AWP and, while no consensus has yet emerged, there is general agreement on the criteria that a new standard should meet. It should be:

• Transparent, easily understood, unambiguous, and reflect the true acquisition cost of a drug.
• Accessible, administratively simple and efficient so that it can be easily adopted by the industry.
• Comprehensive, and offer drug pricing information for all branded and generic products.
• Trustworthy, timely, and updated frequently enough to reflect quickly changing acquisition costs, particularly for generic products.
• Immune to manipulation, auditable, not anti-competitive, stable, and not result in more litigation.

No such standard yet exists, but there are a variety of price types available. In the following sections, we’ll take a look at each.

Actual Acquisition Cost (AAC)
This is the final price that a pharmacy pays, after all discounts have been subtracted. This would be the ideal standard because it is the true cost, but there are a variety of problems with it, as you will see in the chart later on in this paper.

Average Manufacturer Price (AMP)
This is the price that manufacturers report to the Medicaid drug rebate program. It is only reported monthly and quarterly, and even the monthly information is three months old.

Average Sales Price (ASP)
This is the calculated price for Medicare Part B drugs. The use of ASP is problematic, because its accuracy is questioned. In addition, it’s not available for all drugs, and not specific to NDC.

Estimated Acquisition Cost (EAC)
This is either the estimated cost of a product, or a pharmacy’s usual and customary charge.
FUL (Federal Upper Limit)
This is a calculation by CMS (Centers for Medicare and Medicaid Services) for the amount that will be paid in aggregate on multi-source drugs. No FULs have been published since September, 2009.

MAC (Maximum Allowable Cost)
The MAC is defined by each payer/state for its multi-sourced drugs only.

MLP (Manufacturer List Price)
This is the price listed by the drug company.

NADAC (National Average Drug Acquisition Cost)
This new price type was announced on August 4, 2011, and will be based on a voluntary survey of drug invoices. It is still being developed.

WAC (Wholesale Acquisition Cost)
This is the only price type defined in regulations. It is the list price from a manufacturer to a wholesaler or a direct purchaser, without discounts.

Each of these alternatives to AWP has issues associated with it, as you will see in the chart later on in this white paper. So where does this leave the industry? The industry still needs a pricing standard, and a new one that is just becoming available may meet all of the benchmarks — Predictive Acquisition Cost. We’ll take a closer look at it in the next section.

Predictive Acquisition Cost (PAC)
Newly developed by Glass Box Analytics, PAC addresses the shortcomings of the existing standards, and could serve as a long-term drug pricing reimbursement benchmark. It leverages proven concepts from other industries and applies the power of predictive analytics to drug pricing. By using various factors associated with the cost of a drug, it deploys a multi-dimensional predictive analytics model to track the acquisition cost of drugs with sufficient accuracy to support pricing activity. The statistical model is trained to synthesize various known attributes into an overall estimation of acquisition cost.

While each organization will decide which price type to use and the industry as a whole will determine the new price standard, PAC appears to come closer to true acquisition cost than the
alternatives, and meets all the criteria for becoming the industry-wide standard. It is transparent, and has a genuine relation to the actual acquisition costs of drugs. It is accessible, designed to be distributed to all parties in the pharmaceutical supply chain, and can be used for both drug pricing analytics and as a daily contractual reimbursement benchmark. It is comprehensive, and supports brands and generics, including single-source generics. It is timely and adjusts as soon as any of the input factors adjust, synthesizes all relevant information available to it at any point in time. It is immune to manipulation by design and maintains a robust monitoring system to detect any unusual movements in the factors or attempts at manipulation. And it is simple to administer.

Comparison of Price Types

The following chart compares how each of the potential standards rate according to the important industry criteria.

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Conclusion

The pharmaceutical industry has been searching since as far back as the 1970s for a standard that could be widely applied to adjudicate claims and establish proper drug reimbursement. The initial standard, AWP, has been problematic for a number of reasons, varying from true acquisition cost by a wide range.

A number of different standards can be used as an alternative to AWP, including AAC, AMP, ASP, EAC, FUL, MAC, MLP, NADAC, and WAC. But none of them meet the six criteria necessary for a desirable benchmark: transparency, accessibility, comprehensiveness, timeliness, immune to manipulation, and easy to administer.

The new price type PAC addresses the shortcomings of the existing standards, and appears to meet all the important criteria to serve as a long-term drug pricing reimbursement benchmark. PAC leverages proven concepts from other industries and applies the power of predictive analytics to drug pricing. It remains to be seen which price type will replace AWP as the new standard. In the meantime, pharmaceutical organizations need access to all available price types, including AWP and PAC. Both are available, along with all other price types mentioned in this paper, exclusively from Elsevier/Gold Standard.

For more information about PAC, please visit predictiveacquisitioncost.com.

For more information about drug product and price information, please visit goldstandard.com.

PAC applies the power of predictive analytics to drug pricing.