

PROFILE OF THE PRESCRIPTION DRUG WHOLESALING INDUSTRY

EXAMINATION OF ENTITIES DEFINING SUPPLY AND DEMAND IN DRUG DISTRIBUTION

FINAL REPORT

1.3 Major Categories of Wholesalers

Wholesalers can be classified into several categories based on their size, breadth of coverage and activity, and principal function. The following sections profile the "Big Five" wholesalers, regional wholesalers, smaller (i.e., sub-regional and/or specialty) wholesalers, and secondary wholesalers.

1.3.1 The Big Five Wholesalers

The prescription drug wholesaling industry in the United States is highly concentrated, with 90 percent of sales made by five major full-line companies, referred to as the "Big Five." This group consists of McKesson HBOC, Inc., Bergen Brunswig Drug Company, Cardinal Health, Inc., AmeriSource Corporation, and Bindley Western Drug Company (see Table 1-3) (NWDA, 1999 and U.S. District Court for the District of Columbia, 1998). These companies generate from \$7.6 billion to \$21.5 billion per year in revenue, and represent the principal pipeline of drug distribution from manufacturers to dispensers (NWDA, 1999). The Big Five sell to regional distributors but also supply some health care institutions and independent drug stores (i.e., those with no more than three pharmacies). The Big Five distribute a full-line of drug products.

Traditionally, these wholesalers purchased the prescription drugs in large quantities from drug manufacturers, took ownership of the drugs in their own warehouses, and then resold them directly to the retail chains or hospitals (i.e., large dispensers) in desired allotments. This traditional service is referred to as "direct store delivery." Increasingly, however, large purchasers (especially retail chains) prefer self-warehousing, where the retailer buys direct from the manufacturer, stores the drugs in one or more of its own warehouses, and then delivers them to its retail stores and hospitals as needed. Accordingly, the Big Five and various regional wholesalers now also offer "dock-to-dock" delivery and "drop shipment" charging, which are also known as "brokerage" services in the wholesale industry (U.S. District Court for the District of Columbia, 1998). In dock-to-dock delivery, the wholesaler obtains drugs in large quantities from the manufacturer for direct delivery to retail chain or hospital warehouses and does not bring the drugs into its own inventory. In drop shipments, the manufacturer ships the product directly to the customer, but with the order and payment submitted through the wholesaler. In these brokerage operations, the wholesaler does not take ownership of the drugs in its own warehouse at any time. In 1998, these non-stock sales of the Big Five and regional wholesalers amounted to 17 percent (\$12.7 billion) of total sales by wholesalers (\$73.8 billion) (NWDA, 1999).

Company	1998 Annual Sales (\$ Million)	1998 Market Share	1998 Sales Ranking	Number of Distribution Centers	Types of Customers;
McKesson HBOC, Inc.	\$21,484	28%	1	35	Health care institutions - 32% Independent pharmacies - 37% Retail chain pharmacies - 31%

Bergen Brunswig Drug Company	\$16,698	22%	2	31 [a]	Health care institutions - 50% Independent pharmacies - 27% Retail chain pharmacies - 16%
Cardinal Health, Inc.	\$14,928	19%	3	26[b]	Health care institutions - 52% Independent pharmacies - 16% Retail chain pharmacies (non-warehousing) - 29% Retail chain pharmacies (warehousing) - 3%
AmeriSource Corporation	\$8,669	11%	4	19[c]	Health care institutions - 47% Independent pharmacies - 33% Retail chain pharmacies - 20%
Bindley Western Drug Company	\$7,623	10%	5	18	Direct store delivery - 58% [d] Retail chain pharmacies (warehousing) - 42%
Big Five Total	\$69,402	90.0%	NA	129	NA
Source: NWDA, 1999; U.S. District Court for the District of Columbia, 1998; Bindley Western Industries, Inc., 2000 [a] Additionally, the company has alternate site and depot facilities. [b] Additionally, the company has 4 specialty distribution centers, 1 medical/surgical distribution facility, 6 packaging facilities, and 4 specialty centers. [c] The company also has 3 specialty products distribution facilities. [d] The annual report of the company did not provide figures for the different types of direct store deliveries.					

Wholesalers generate revenues from both ends of the wholesale transaction. From dispensers, they receive the "upcharge," which is the percentage fee paid by dispensers for the cost of distribution, and other brokerage fees. These revenues are generally described as the "sell-side" margins. From manufacturers they receive "buy-side" margins, consisting of cash rebates and discounts for prompt and/or early payment. Distributors also might generate revenues by using the time differential, known as the "float," between when they receive payment from the drug purchaser and when they pay their supplier.

While the Big Five are very large business entities, price and competitive conditions dictate that they operate on narrow profit margins. In general, the wholesale markup is modest. According to data generated during a recent U.S. court case, for every dollar of prescription drugs sold in 1997, 76 cents went to the manufacturer, 20 cents to the dispenser (i.e., pharmacy), and only 4 cents to the wholesale distributor (U.S. District Court for the District of Columbia, 1998).⁽¹⁾ The NWDA reported the after-tax net profit expressed as a percent of sales, was only 0.62 percent for 1998 (NWDA, 1999).

The Big Five purchase the large majority of their drugs directly from the drug manufacturers. Because the Big Five have formal, written distribution contracts and conduct more than 2 transactions in any 24-month period with the drug manufacturers, they are clearly considered authorized distributors as the Agency has defined the term. The Big Five also purchase drugs from other distributors who can occasionally offer lower prices. The role of price discounting in the industry is described in more detail below.

1.3.2 Regional Wholesalers

The next largest distributors after the Big Five are the regional wholesalers. While at least an order of magnitude smaller than the Big Five, these companies generate revenues of approximately \$500 million to \$900 million per year (NWDA, 1999). ERG estimates that there are approximately 70 regional prescription drug wholesalers, based on the membership roster of the National Wholesale Druggist Association (NWDA), an industry trade association, and comments submitted to the FDA docket by Purity Distributors (Riccardi, 2000). Table 1-4 presents the 1998 sales volumes and rankings of the top regional wholesalers.

Regional distributors are distinguished from the Big Five by a smaller volume throughput of drugs. Many regional distributors, however, offer a complete or nearly complete line of drugs. Unlike the Big Five, most regional wholesalers do not have formal written distribution contracts with the pharmaceutical manufacturers, although many conduct business with them on a regular basis. Thus, while these wholesalers could be considered authorized distributors under industry's interpretation of the 1988 FDA Guidance, they are not authorized according to the final rule, 21 CFR Part 203.

Regional distributors and the Big Five sell to the same industry sectors. The regional distributors can compete with the Big Five because they can provide better service to some of the areas in their region and because many of their drug purchases from manufacturers are on terms as or nearly as favorable as those offered to the Big Five. The main customers for the two groups combined include: (1) health care institutions (36.6 percent of total sales), (2) independent (non-chain) drug stores (31.6 percent of sales), (3) retail chains (25.7 percent of sales), and (4) other entities, such as surgical or dialysis centers and physicians' offices (6.1 percent) (Casteuble, 2000a). Table 1-5 summarizes the distribution of drug sales by type of customer.

Company	Sales (\$ Million)	Market Share	Sales Ranking
Neuman Distributors, Inc.	\$1,668	2%	6
Kinray, Inc.	\$905	1%	7
C.D. Smith Healthcare Inc.	\$798	1%	8
D & K Healthcare Resources, Inc.	\$703	1%	9
Remo Drug Corp.	\$508	1%	10
N.C. Mutual Wholesale Drug Co.	\$480		11
The F. Dohmen Co.	\$423		12
Walsh Distribution, Inc.	\$387		13
Harvard Drug Group	\$347		14
H.D. Smith Wholesale Drug Co.	\$306		15
Bellco Drug Corporation	\$300		16
Value Drug Company	\$267		17
Smith/Smith/Texas	\$235		18
FMC Distributors Inc.	\$175		19
Rochester Drug Cooperative	\$160		20
Source: NWDA, 1999			

Type of Customer	Net Sales [a] (\$ million)	Percent of Total Stock Sales	Percent of Total sales
Institutional Dispensers	\$22,362	36.6%	30.3%
Hospitals	\$17,902	29.3%	24.3%

Clinics and Nursing Homes	\$4,460	7.3%	6.0%
Independent Drug Stores	\$19,308	31.6%	26.2%
Retail Chains	\$15,716	25.7%	21.3%
Chain Drug Stores	\$7,027	11.5%	9.5%
Chain Drug Warehouses	\$1,528	2.5%	2.1%
Mass Merchandisers and Food Stores	\$7,161	11.7%	9.7%
Other Customers	\$3,715	6.1%	5.0%
Total Stock Sales	\$61,101	100.0%	82.8%
Non-Stock Sales [b]	\$12,700	NA	17.2%
Total Sales	\$73,801	NA	100.0%
Source: NWDA, 1999 "NA" = Not available [a] Includes sales of prescription drugs, OTC drugs, health and beauty aids, general merchandise, and other products. [b] Non-stock sales include brokerage sales, dock-to-dock, drop shipments, and any other form of sales not placed in inventory that are generally sold at a significantly lower margin. Most non-stock sales are to chain drug store warehouses.			

Combined, the Big Five and the regional distributors operate a total of 235 distribution centers across the continental United States and U.S. Territories (NWDA, 1999 and Pharmaceutical Distributors Association, [PDA], 2000a). Based on data provided by the NWDA Industry Performance and Trend Reporting Program, the average number of suppliers (whether manufacturer or other wholesaler) per wholesaler among the Big Five and regional companies is 913 in 1998. This represents an increase of around 47 percent from its 1994 level of 620 (NWDA, 1999). The increase is at least partly due to the significant growth in the variety of products offered in many pharmacies, and especially by the increase in herbal products and remedies now being offered (Casteuble, 2000b).

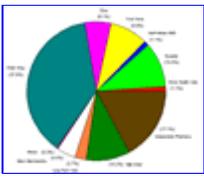
1.3.3 Smaller Wholesalers

Numerous additional, and generally smaller, wholesalers also distribute pharmaceutical products. This category captures wholesalers of varying characteristics. For example, some of these companies carry a relatively full line of drug products and provide distribution service to small independent pharmacies and physicians. Other wholesalers distribute partial lines of pharmaceutical products, such as injectables, that require special handling. Still other wholesalers team with medical supply companies to provide the combination lines of drug and medical devices dispensed from physician's office, or supplies provided for veterinarians' offices.

Many viable drug wholesalers are quite small. Some companies contacted for this study generated over \$10 million in annual revenues with fewer than 10 staff dedicated to drug distribution.

Some of these wholesalers serve small drug dispensers, such as small, independent pharmacies, that are not part of buying groups or under contract to larger, full-line distributors.⁽²⁾ Smaller wholesalers generally are willing to deal in smaller volumes than regional wholesalers and serve the individual independent pharmacies and physicians offices. Figure 1-2 presents the distribution of prescription drug sales by dispensing outlet. In the figure, physician's offices are included in the "Other" category, which represents 0.3 percent of total sales. Small dispensers of various types (e.g., small clinics) are also found in the other dispenser categories as well.

Figure 1.2



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Based on discussions with industry personnel, ERG concluded that virtually none of these smaller wholesalers have formal distribution contracts with drug manufacturers and thus, are not considered authorized distributors. Further, many of these wholesalers probably do not purchase products directly from manufacturers on a regular basis. For example, one wholesaler reports that 83 percent of its purchases are from 3 major full-line wholesalers, 8 percent are from other distributors, and only 9 percent are from 11 different manufacturers (Ford and Everly, 2000). Thus, most smaller wholesalers probably do not meet the requirement for 2 transactions with most pharmaceutical manufacturers in any 24-month period.

The customers of smaller wholesalers do not purchase pharmaceuticals from the major wholesalers (the Big Five or the regional distributors) because:

- They do not meet the minimum volume purchase requirements set by major wholesalers to qualify potential customers; or
- Some wholesalers sell prescription drugs in packages that are inconveniently large for these customers; (Ford and Everly, 2000, Everly, 2000, and Clark, 2000).

1.3.4 Secondary Wholesalers

Secondary wholesalers generally do not offer a full line of pharmaceutical products but specialize in purchasing and selling selected discounted drug products. Pharmaceutical manufacturers occasionally offer drug products for sale, such as when they strive to meet a quarterly sales goal or wish to sell off inventory in advance of a price increase (Riccardi, 2000). At such times, manufacturers offer products for a limited time at a discounted price. Cash customers often receive an additional discount. In response to such sales, secondary wholesalers (and some full-line national or regional wholesalers) will purchase quantities of the sale products.

Secondary wholesalers in turn offer the discounted products for sale, principally to other wholesalers. They sell products to many other wholesalers, including the Big Five and regional wholesalers, because their discounted price undercuts the regular prices being offered by the manufacturer. Thus, a manufacturer's special sale price for a given drug might undercut the price at which the drug is sold under contract to the Big Five and to regional wholesalers. The Big Five might then reduce their purchases under contract for selected drugs in order to take advantage of sale prices being offered by these secondary and other wholesalers.

While any distributor might be able to take advantage of manufacturer sale prices, secondary wholesalers are distinguished by their willingness to risk substantial capital in buying and trading discounted drugs. Their activities are built around the rapid turnover of discounted drugs in a fashion similar to that of discounters in other industries. One executive noted that his company will fax its inventory and current sale price list either daily or at least twice a week to potential customers. The companies do very little advertising or sales promotion work other than publishing and advertising their sale prices periodically. Industry contacts also noted that, while secondary wholesalers are able to build some customer loyalty, their relationships are built almost entirely on the competitiveness of their sale prices.

There is no formal definition or count of the number of secondary wholesalers. Like other wholesalers, some of these firms are very modest in size, with fewer than 10 staff handling drug orders. There are three prominent secondary wholesalers, each of which are fairly large companies, namely Supreme Distributors Company, Victory Wholesale Grocers Company, and Quality King Distributors, Inc. As their

names indicate, these secondary wholesalers distribute other products, including food.

Additionally, a wide spectrum of wholesalers, including the Big Five companies, engage in trading of pharmaceutical products to take advantage of price differentials. Thus, even wholesalers that are primarily engaged in routine distribution services will sometimes trade in pharmaceuticals to take advantage of price differentials.

Like the majority of regional and smaller wholesalers, most secondary wholesalers do not have a written distribution agreement with drug manufacturers whose products they purchase and resell. Some of the reasons why drug manufacturers decline to enter into written distribution agreements with the secondary wholesalers include (1) the inability of these wholesalers to carry the full line of manufacturers' products and maintain a required line of credit, and (2) manufacturers' unwillingness to open new accounts (PDA, 2000b). Furthermore, secondary wholesalers are only irregular customers of the manufacturers and thus do not represent an avenue for routine distribution of the manufacturers' products.

Many secondary wholesalers engage in numerous transactions with pharmaceutical manufacturers over the course of any 24-month period but usually lack formal written agreements with pharmaceutical manufacturers. Thus, while many secondary wholesalers have believed themselves to be authorized distributors under industry's interpretation of the 1988 FDA Guidance, they are not classified as such under the final rule (21 CFR Part 203).

There are believed to be numerous, smaller, secondary wholesalers as well as the large firms mentioned above. The small secondary wholesalers are entities that also engage substantially in trading of price discounted drugs. This group also resembles the smaller wholesalers described in the previous section, however, in that they service portions of the industry that are not supplied by the Big Five or by the larger regional wholesalers. Even these small secondary wholesalers participate in manufacturer sales of products and trade products aggressively to take advantage of price discounts. ERG lacks quantitative data or distinct industry statistics that allows it to characterize further the population of small secondary wholesalers.

(1) Based on the context of the discussion in the source, this estimate of the division of the average prescription dollar among manufacturers, wholesalers, and dispensers, reflects all rebates and markups applicable to the industry.

(2) A small drug store's contract with a distributor might require that they purchase all pharmaceuticals or a specified range of pharmaceuticals from that distributor.

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