Medco's Transition to a Transparent Business Model

By
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Abstract

In an effort to make its business model more transparent, Medco Health Solutions, the 2nd largest independent pharmacy benefit manager, first disclosed in 3Q2004 that its rebate retention rate was 40.5%. In the nine months since disclosure, Medco has allowed its rebate retention rate to drop to 28.1% and it has seen rebate's share of gross profits decline from 71.7% to 48.0%. Yet, Medco has been able to maintain its overall gross profit margin by moving toward cost-basing pricing for its captive mail order operations and claims processing.

While the transition has been smooth so far, the stage has been set for disruptions after 2006. The rise in mail order prices has weakened Medco's justification for exclusionary practices favoring its captive mail order operations. In 2006, there will be a significant number of rebate-generating brand drugs that will lose their patent protection. Medco cannot continually recover rebates losses by increasing service-based fees. It will be forced to levy significant management fees based on headcount or the number of prescriptions processed. Medco will be challenged after 2006 to retain market share as it begins to offer contracts with significant management fees that can easily be compared to rivals' offers.

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Disclosures:

I have not received any remuneration for this paper nor have I financial interest in any company cited in this working paper.

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Medco in Transition: 3Q2004 versus 2Q2005

The management of the drug benefit portion of healthcare plans has become the domain of contracted specialists called pharmacy benefit managers (PBMs). The three largest, independent PBMs –Caremark Rx, Medco Health Solutions, and Express Scripts, (known as "The Big 3") -- have come under attack in the past few years for not acting in the best interest of their clients. The source of the problem is attributed to a business model that lacks transparency and is too dependent on rebates retained from brand name drug manufacturers.

A business model embodies decisions made by a company as to its core competency coupled with decisions as to how it generates revenue. PBMs offer health care plan sponsors a bundle of services that are designed to contain drug benefit costs. These techniques are generally grouped into the following categories: (1) claims processing, (2) retail network management, (3) formulary and rebate management, (4) mail order pharmacy, and (5) drug utilization review. PBMs receive revenue from plan sponsors and from brand name drug manufacturers. Plan sponsors reimbursement PBMs for prescriptions filled through retail pharmacy networks and though the PBMs' own mail order operations. They also pay PBMs' claims processing fees and management fees that help cover expenses for formulary design, drug utilization review and disease management. Because formulary design and compliance can affect the demand for brand name drugs, PBMs are able to negotiate and receive rebates from manufacturers. PBMs also receive data fees and physician "detailing" fees from brand name drug manufacturers.

Until recently, none of the Big 3 PBMs disclosed any detail about rebates received from brand name drug manufactures. The key statistic to understanding the PBM business model is what we have called the rebate retention rate – the percent of rebates from drug manufacturers retained as gross profits.[1] On October 28, 2004, Medco Health Solutions, Inc. disclosed to the public for the first time its rebate retention rate.[2] Chief Financial Officer, Jo Ann Reed, announced in a

conference call to investors that Medco retained 40.5% of $754 Million in gross rebates received from pharmaceutical manufacturers during the 3rd quarter of 2004. She stated that this disclosure was initiated in an effort to make Medco's business model more transparent to the public and that it would become a standard feature of all future quarterly statements. What she did not say was that the disclosure was part of a $29 Million settlement of a suit brought by 20 states alleging improper prescription switching by Medco.[3]

Based on the key disclosure of the rebate retention rate, we have completely disaggregated Medco's 3Q2004 gross profits by revenue source. The results were presented in our paper "Quantifying Medco's Business Model." [4] The purpose of this paper is to follow up our earlier work by disaggregating Medco's profit and loss statement for the period 2Q2005. In less than a year, Medco has allowed its rebate retention rate to drop from 40.5% to 28.1%. This translates into a precipitous drop in the share of Medco's gross profits derived from retained rebates from 71.7% to 48.0%. Yet, Medco was able to maintain its overall gross profit margin in the face of this loss.[5]

The transition of Medco's business model between 3Q2004 and 2Q2005 is summarized by the statistics presented in Exhibit 1. A complete disaggregation of Medco's gross profits for these two periods is presented in the Appendix. Even though Medco first disclosed its rebate retention rate in 3Q2004, the CEO David Snow has made presentations at recent investor conferences which reveal trends in Medco's rebate retention rate over a longer period. The graph below recreates Snow's slide presentation at a June 2005 Goldman Sachs conference.[6]

Medco's Business Model in Transition

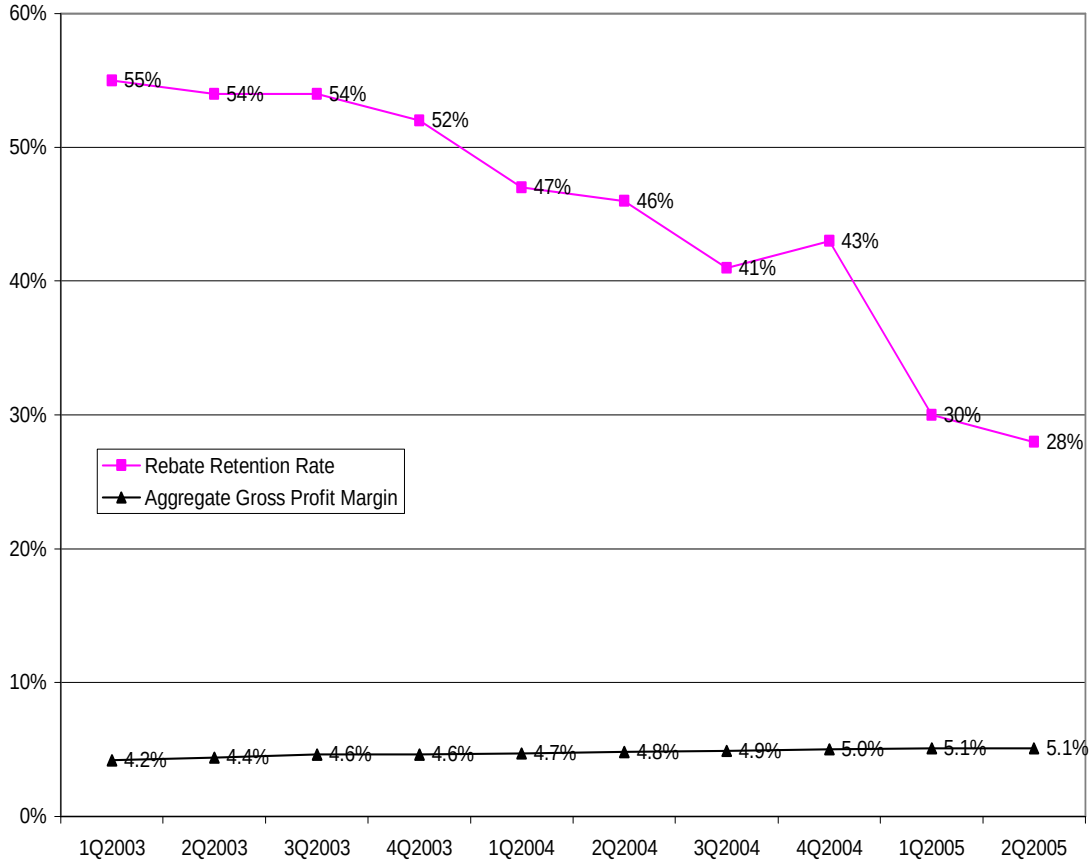

Exhibit 1: Summary of Medco's Business Model in Transition

Statistics	3Q2004	2Q2005
Gross rebates received	$754 M.	$779 M.
Rebate retention rate	40.5%	28.1%
Net rebates retained as gross profits	$ 305 M.	$ 219 M.
Retained rebates share gross profits	71.0%	48.5%
Mail order gross profits	$ 50 M	$ 148 M
Mail order gross profit margin	< 2%	< 5%
Mail order share of gross profits	11.8%	32.4%
Claims and data fees gross profits	$50 M.	$ 67 M.
Claims and data fees gross profit margin	62.5%	72.8%
Claims and data fees share of gross profits	11.7%	14.7%
Aggregate gross profits	$ 426 M.	$ 456 M.
Aggregate gross profit margin	4.9%	5.1%
Generic drug utilization rate	46.8%	51.0%
Mail order share of Rx fulfillment	45.7%	36.1%

The Move toward Cost-Based Pricing

Exhibit 1 indicates that despite a drop in retained rebates of $86 Million, Medco was largely able to recoup these losses through greater gross profits from its captive mail order business. The increase in mail order gross profits was achieved totally through an increase in margins as opposed to a growth in top line revenue. Top line revenue actually fell during this period as Medco's mail order business has been hurt by the loss of the contract from the Federal Employees Health Benefit Plan (FEHBP). We have estimated that Medco's mail order margins have tripled from 1.5% to 4.6% over a nine-month period. Improved margins in data management and claims processing also have helped to compensate for rebate losses.

The movement toward transparency – greater pass-through of rebates and less rebate retention – has meant that Medco has moved toward cost-based pricing for mail order and claims processing. In the past, Medco has used it competitive advantage in rebate negotiations, coupled with secrecy surrounding it rebate retention rate, to win contracts through low bids on mail order

and claims processing while recouping service margin deficiencies though rebate retention. The epitome of Medco's strategy was its bid on the mail order only contract for the FEHBP, which we believe was a case of predatory pricing.[8]

The Loss of Mail Order Price Superiority

There have been several credible studies of pricing differentials between retail pharmacy networks and captive mail order operations of the Big 3 PBMs. Those studies indicate that brand name drug prescriptions average 9% to 10% lower if delivered via mail than if filled by retail outlets.[9] [10] This differential has been the main justification used by the Big 3 PBMs for engaging in exclusionary practices that favor their captive mail order operations. This includes such practices as mandatory mail order and precluding retail pharmacies from dispensing 90-day prescriptions for patients requiring drug for chronic illnesses such as high cholesterol and diabetes.

While retail-mail order price differentials for generic drugs can be explained by relative dispensing efficiencies, the same cannot be said for brand name drugs. We have shown that most of the retail-mail order price differential for brand name drugs is due to an acceptance of lower margins and not due to relative operating costs.[11] The analysis here suggests that Medco's mail order operations has lost about one-third of its price superiority – 3 percentage points – in less than a year. If Medco hopes to maintain overall gross profit margins in the face of future rebate losses, it will surely have to increase mail order prices to the point that its price superiority would be virtually eliminated. This increase will eliminate Medco's justification for exclusionary practices in the mail order pharmacy market.

More Focus on Managed Care versus Managed Price

Drug benefit costs are the product of the "three U's" – usage, utilization mix, and unit prices. Medco has stated that its focus has been on unit prices rather than usage and utilization rates: [12]

> Our business model is designed to reduce this level of drug trend, primarily by obtaining competitive discounts and rebates from pharmaceutical manufacturers, obtaining competitive discounts from retail pharmacies and efficiently administering prescriptions filled through our mail order pharmacies

As Medco transitions its business model toward transparency, it is not likely to continue to win contracts solely through its pricing of mail order and claims processing. Clients have become wise to the limits of unit prices as a measure of PBM performance. They understand that generic utilization rates may be a better measure of PBM performance than unit prices for mail order or claims processing.

Medco has increased its overall generic utilization rate from 46.8% to 51.0% in nine months. The question is, how much is attributable to Medco and how much is due to trends beyond Medco's control. By far, the most important effect on year-to-year changes in generic utilization rates is the number of blockbuster drugs losing patents. Still, we believe that an important consequence of the trend toward transparency is a greater effort by Medco to manage generic utilization rates through more aggressive prescription switching to generics that are therapeutically equivalent to brand name drugs. This is over and above the "no-brainer" switching to generics that are both therapeutic and bio-equivalent to off-patent brands.

How Will Medco Fair After 2006?

Exhibit 1 indicates that Medco has been fortunate in its transition in that gross rebates received have remained stable during 2005. That stability will end in 2006 when an unusually large number of rebate-generating, blockbuster drugs lose their patent protection. We have presented the case that rebates are only paid on brand name drugs with therapeutic equivalents. They are not paid once a drug loses its patent protection and faces competition from low cost generics. [13] Also, rebates are not paid when a drug has a monopoly position. Nor are they paid when generalizations about therapeutic equivalency are problematic as is the case for central nervous

system drugs, such an anti-depressants and anticonvulsants. Exhibit 2 presents our estimate of the share of rebates-generating drugs losing patent protection in 2006: [14] [15]

Exhibit 2:
Estimate of Share of Rebate-Generating Brand Drugs Losing Patent in 2006

Brand Drug	Therapeutic Class	Quarter Off-Patent	Sales - 2004 $ Bil.	% of Total Sales
Prevacid	Proton Pump Inhibitor	1Q2006	4,202.6	1.8%
Pravachol	Statin	2Q2006	2,197.3	0.9%
Zocor	Statin	3Q2006	4,546.5	1.9%
Aciphex	Proton Pump Inhibitor	4Q2006	1,290.0	0.6%
Allegra/Allegra D	2nd Gen Antihistamine	4Q2006	2,114.7	0.9%
R1			14,351.1	6.1%
R2	Brand spend as percent of total		80%	
R3	Share of brand drugs generating rebates above Medicaid minimum		36%	
R4 = R2 * R3	Rebate-generating brand drug as percent of total spending		28.8%	
R5 = R1 / R4	**Share of rebate-generating drug losing patent in 2006**		**21.2%**	

Sources: sales data Raymond James Research Letter, CBO Letter for R3

This estimate does not include such central nervous system drugs as Lexapro or Zoloft that are also slated to lose their patents in 2006.

In 2Q2005, Medco's rebate retention was $ 219 Million, which comprised 48.5% of its gross profits. The question is how will Medco make up 21.2% of this, or $ 46 Million, as the result of losses detailed above. There may still be some room to raise mail order prices and margins another 1.5 percentage points to cover this loss. This would virtually eliminate mail order's price superiority over retail outlets.

How can Medco maintain its aggregate gross profit margin if it passes through 100% of rebates received to clients? The possibilities for additional prices increases on specific services such as mail order or claims will have been exhausted by 2007. If Medco wants to maintain its overall gross profits rates under a completely transparent business model, it will have to start charging clients generalized management fees. By "generalized" management, fees we mean fees whose basis is not tied to some service level. There are some options here, but the choice will be difficult. Medco could institute fees based on such performance measures as delivered generic utilization rates or per member per month (PMPM) drug benefit costs. This would introduce a degree of risk neither Medco nor its clients may want to assume.

More likely would be fees based on headcount or number of prescriptions processed. Assume Medco will have to recoup an addition loss of about $175 Million per quarter, or $ 700 Million per year, if it goes completely transparent after 2006. This translates to about $ 3 per member per quarter, or $12 per member per year, as Medco now covers about 60 million lives. Some of Medco's largest clients are insurance companies covering 4 to 5 million lives. Management fees for them would be in the $48 Million to $60 Million range per year. Alternatively, Medco could levy a generalized fee based on prescriptions processed. In 2Q2005, Medco managed 173.5 million prescriptions. Medco would have to charge clients and additional $1.00 per script to cover rebate losses incurred by going completely transparent.

A completely transparent PBM business model cannot rely solely on service-based fees. In order to maintain current gross profit margins, Medco must derive about a third of its gross profits from generalized management fees. Medco will be challenged after 2006 to retain market share as it begins to offer contracts with significant management fees that can easily be compared to rivals' offers.

Notes:

(1) LW Abrams, "Estimating the Rebate-Retention Rate of Pharmacy Benefit Managers," April 2003. Available at http://www.nu-retail.com/rrr.pdf

(2) Medco Health Solutions, "2004 Analyst Day Presentation," November 11, 2004, slide show available at http://media.corporate-ir.net/media_files/NYS/MHS/presentations/MHS111104.pdf pp. 79 –80.

(3) Ellen Beck, "Analysis: Medco Deal Lifts Secrecy Veil," The Washington Times, April 26, 2004. Available at http://washingtontimes.com/upi-breaking/20040426-021009-6955r.htm

(4) LW Abrams, "Quantifying Medco's Business Model, "Working Paper, April 2005. Available at www.nu-retail.com/quantifying_Medco_business_model.pdf

(5) Securities and Exchange Commission, Medco Health Solutions, Inc. 10-Q SEC Quarter Ending June 30, 2005

(6) Medco Health Solutions, presentation by CEO David Snow, Goldman Sachs Healthcare Services Conferences http://library.corporate-ir.net/library/13/131/131268/items/155393/Goldman_61405.pdf, p. 13

(7) Securities and Exchange Commission, Medco Health Solutions, Inc. 10-Q SEC Quarter Ending June 30, 2005

(8) LW Abrams, "Exclusionary Practices in the Mail Order Pharmacy Market, "Working Paper, September 2005. Available at www.nu-retail.com

(9) Lind KD, *Medicare Drug Discount Card Program*, Washington, D.C.: AARP Public Policy Institute No.2004-16; 2004: p. 39. Available at http://research.aarp.org/health/

(10) U.S. General Accounting Office, *Federal Employee Health Benefits: Effects of Using Pharmacy Benefit Managers on Health Plans, Enrollees, and Pharmacies.* Washington, D.C.: Pub. No. GAO-03-196; 2003: p.10

(11) LW Abrams, "Exclusionary Practices in the Mail Order Pharmacy Market, "Working Paper, September 2005. Available at www.nu-retail.com

(12) Securities and Exchange Commission, Medco Health Solutions, Inc. 10-K Report for the Year Ending December 27, 2003

(13) LW Abrams, "Pharmacy Benefits Managers as Bargaining Agents," Paper Presented at the 80th Western Economic Association International Meeting, July 2005. Available at http://www.nu-retail.com/pbm_bargaining_paper.pdf

(14) Raymond James, "Healthcare Industry Brief", March 17, 2005 Available at www.raymondjames.com/pdfs/industry/iHea031705b_0758.pdf

(15) Congressional Budget Office, "The Rebate Medicaid Receives on Brand-Name Prescription Drugs" Letter to Senator Charles Grassley dated June 22, 2005. Available at http://www.cbo.gov/ftpdocs/64xx/doc6493/06-21-MedicaidRebate.pdf

Appendix

Margin Analysis:
Medco Health Solutions, Inc
Income Statement for the Third Quarter Ending September 30, 2004

Column A	Column B	Column C	Column D	Column E	Column F	
Row	Source of Column D	Line Item Description	Billions $s	% of Revenue		
1	Conference Call	**Rebate-retention rate**	**40.5%**			
		Revenue:				
2	D6-sum(D3:D5)	Rx Reimbursement From Clients	4.034	46.4%		
	10-Q Data	Member Co-payments	1.631	18.8%		mail order share
3	(100%-D1)* D8	Less: Rebates Remitted	-0.449	-5.2%		45.7%
4	Conference Call	Mail Order Revenue	3.400	39.1%		
5	10-Q Data	Claims and Data Service Revenue	0.080	0.9%		
6	10-Q Data	Total Revenue	8.696	100.0%		
		Costs and expenses:				
7	D11-sum(D8:D10)	Rx Reimbursement to Retail Pharm	4.013			
	10-Q Data	Member Co-Payments	1.631			
8	Conference Call	Less: Rebates Received	-0.754			
9	D4-D15	Mail Order Costs	3.350			
10	10-Q Data	Claims and Data Service Costs	0.030			
11	10-Q Data	Total Cost of Sales	8.270	95.1%		
12	10-Q Data	Gross Profit	0.426	4.9%	6.0%	GP Without Co-Pay
		Gross Profit		% of Gross Profit	Gross Profit Margin	
13	**Estimate: .05%**	Retail Network	0.020	4.7%	0.5%	"The Spread"
14	-D3-D8	Rebate Retention	0.305	71.7%	40.5%	"RebateRetentionRate"
15	D17-D13-D14-D16	Mail Order	0.050	11.8%	1.5%	
16	D5-D10	Claims and Data Service	0.050	11.7%	62.5%	
17	10-Q Data	Total Gross Profits	0.426	100.00%	4.9%	

Sources: Medco Health Solutions, 10-Q Report to the SEC for the Quarter Ending September 31, 2004

Margin Analysis:
Medco Health Solutions, Inc
Income Statement for the Second Quarter Ending June 31, 2005

Column A	Column B	Column C	Column D	Column E	Column F	
Row	Source of Column D	Line Item Description	Billions $s	% of Revenue		
1	Conference Call	**Rebate-retention rate**	**28.0%**			
		Revenue:				
2	D6-sum(D3:D5)	Rx Reimbursement From Clients	4.493	49.9%		
	10-Q Data	Member Co-payments	1.796	20.0%		mail order share
3	(100%-D1)* D8	Less: Rebates Remitted	-0.560	-6.2%		36.1%
4	Conference Call	Mail Order Revenue	3.178	35.3%		
5	10-Q Data	Claims and Data Service Revenue	0.092	1.0%		
6	10-Q Data	Total Revenue	8.999	100.0%		
		Costs and expenses:				
7	D11-sum(D8:D10)	Rx Reimbursement to Retail Pharm	4.471			
	10-Q Data	Member Co-Payments	1.796			
8	Conference Call	Less: Rebates Received	-0.779			
9	D4-D15	Mail Order Costs	3.030			
10	10-Q Data	Claims and Data Service Costs	0.025			
11	10-Q Data	Total Cost of Sales	8.543	94.9%		
12	10-Q Data	Gross Profit	0.456	5.1%	6.3%	GP Without Co-Pay
		Gross Profit		% of Gross Profit	Gross Profit Margin	
13	**Estimate: .05%**	Retail Network	0.022	4.9%	0.5%	"The Spread"
14	-D3-D8	Rebate Retention	0.219	48.0%	28.1%	"RebateRetentionRate"
15	D17-D13-D14-D16	Mail Order	0.148	32.4%	4.6%	
16	D5-D10	Claims and Data Service	0.067	14.7%	72.8%	
17	10-Q Data	Total Gross Profits	0.456	100.00%	5.1%	

Sources: Medco Health Solutions, 10-Q Report to the SEC for the Quarter Ending June 30, 2005