Unlocking the potential of the pharma distribution channel
Engage, Enable, Energize
The Indian pharmaceutical industry has been undergoing titanic changes during the last few years. The industry has grappled with challenges and constraints in terms of patent expiries, declining R&D productivity, cost and pricing pressures, access to healthcare and regulatory environment. This is prompting companies to examine all aspects of their operations to make them more cost efficient while improving service to patients and doctors.

In the pharmaceutical industry, the sales force plays a pivotal role in demand generation processes, and the supply chain ensures demand fulfilment. Significant amount of work is being done in improving the deployment and training of the sales force to address competitive pressures in the market. Supply chain efficiencies have also been brought in by many companies over the years with a thrust on process engineering and upgradation, primarily insight driven and based purely on financial parameters. It is now the time to integrate supply chain with the demand generation process to adopt a holistic approach focussed on the customers for enduring performance of the organization.

Accordingly, we at the Organisation of Pharmaceutical Producers of India (OPPI) have partnered with Ernst & Young to undertake a research study that discusses the importance of supply chain management and changes that can be brought about to make business operations more competitive based on insights obtained from pharma companies, stockists, wholesalers and retailers in our country.

Effective supply chain management focussed on the customer will certainly be the business enabler, going forward. This is a pioneering research study in the Indian context and will help open opportunities to better service customers at the market place.

We thank members of the Materials Management Committee of OPPI and the Ernst & Young team for preparing this important paper aimed at offering significant value to the stakeholders in pursuit of excellence.
By unlocking the potential of the pharma distribution channel, we can significantly enhance the overall performance and efficiency of the pharmaceutical industry in India. The unique channel characterized by high fragmentation, lack of information infrastructure, and opacity presents a vacuum in critical channel information and intelligence. This vacuum is often filled by gut feel, wishful thinking, or half-truths, ultimately impairing the quality of forecasting, planning, promotional effectiveness, and sales productivity.

This report aims to propose a solution for bringing about a radical transformation in channel management and leveraging by the pharma industry. The process includes:

1. Demystify the current state of channel performance along with root causes for gaps through a limited survey involving pharmaceutical companies, distributors, and retailers.
2. Detailed analysis of the business impact of the findings of the survey. This section explains the convoluted interdependencies between effective channel management, trade hygiene, sales force motivation, and performance of OTX and ethical brands.
3. Develop possible solutions to mitigate/eliminate root causes while heralding a radical change in channel management philosophy, policies, and practices.

We are grateful to OPPI for this opportunity to partner with them in the preparation of this Knowledge Paper. We also want to thank several persons from the industry and channel for their uninhibited and insightful participation which has significantly added to the quality of observations and recommendations in the report.

It was an exciting, exacting, and enriching experience for us to put this paper together in a short time and we sincerely hope that this sets the mood, motivation, and mandate for a transformational change in channel management in the Indian Pharma industry.
Key findings, implications and way forward
1. Context of the study

Traditionally, distribution in the context of the Indian pharma industry has primarily been an operational function with its focus limited up to operations at the Carrying & Forwarding Agent (CFA) level. Beyond this is a largely opaque but critical, extended supply chain with multiple stakeholders, which links supply to the end consumer.

In this study, the attempt has been to understand the character, dynamics and players of the post-CFA supply chain, with the intention of strategically leveraging this channel for growth rather than being limited by its capabilities and constraints.

The key tool employed to understand these aspects is a primary survey of the sales, marketing and distribution functions of large MNCs and Indian pharma companies (to determine how the industry looks at distribution), as well of trade members including stockists, semi-wholesalers and retailers, to assess the health and performance of the post-CFA supply chain.

However, keeping in mind the larger agenda of leveraging the distribution function for growth rather than as a purely service function, it is imperative to understand the implications of the findings of the study in the larger scheme of industry growth.

Therefore, we have included a section in which we have attempted to interpret the findings of the study in the context of the changing trends and drivers of the domestic pharmaceutical industry.

We have also included potential solutions to the key issues identified in the study as well as the key benefits and critical success factors of these solutions in the ‘way forward’ section.

2. Key findings of the study

We have structured the key findings on the following two aspects:

- **Effectiveness** of the post-CFA supply chain in making products available to the end consumer, which manifests in loss of sales over the retail counter
- **Efficiency** of the supply chain in terms of the cost of making products available to the end consumer, which manifests itself in excess inventory levels in the channel and a month-end “skew” in stockists’ inventories

![Source: IMS 2011 and 2012 (MAT July) data for Pharma market, Primary interviews for the rest](image-url)

Note: Figures mentioned under ‘Efficiency’ (inventory levels & skewness in sales) are typically prevalent in the industry but may vary from company to company.

*Sales loss by volume

**OTX are mature, late lifecycle, acute therapy brands which are prescription based but have bulk of non-prescription sales. Small OTX brands can be defined as a sub-set of OTX brands which are relatively smaller in size & reach (<INR 15-20crore brand size). There is typically a geographical skew in small OTX brands, with reach & performance being relatively better in certain geographies compared to others**
2.1 Effectiveness - Non-availability leading to sales loss

Loss of sales due to non-availability of products at the retailer’s end is a reality in the current pharma distribution setup. However, the incidence and quantum of this loss differs across geographies and product categories. The extent of sales loss varies from up to 1% in Metros (across product categories) to up to 5% in Tier 2 & rural geographies (as high as 20% in small OTX brands).

The variation in loss of sales across geographies and product categories can be attributed to supply chain aspects such as the reach and service levels, working capital constraints, awareness amongst customers and net margins to stakeholders.

Reach and service: The reach of companies in terms of availability of active distributors and retail outlets stocking their products varies across geographies. This determines the competitive intensity among the stakeholders (stockists, semi-wholesalers and retailers), services to retailers and thereof to customers. Companies have multiple stockists in metros – in some cases, more than 30-40 per city. This leads to intense competition among stockists to obtain business from retailers. The resultant competition results in retailers being serviced much more frequently (within a few hours to less than a day in the case of stock-outs or bounced prescriptions), which minimizes loss of sale due to non-availability of stock at the retailer. The high density of retailers in a metro has resulted in a customer having the option of going to an alternate retailer in the event of non-availability of the product at one retailer. Therefore, a retailer may lose a customer, but a company does not.

As one moves toward rural areas, the number of stockists per company decreases and hence the competition among stockists and frequency of service to retailers decreases. Consequently, the probability of loss of sales due to non-availability increases. In addition, retailer density also decreases, and therefore, the co-relation between the probability of a retailer losing a sale and a company doing so also increases relatively.
Unlocking the potential of the pharma distribution channel

### Engage, Enable, Energize

**Metros**
- Number of stockists per company supplying to retailer - typically 4-5
- High service levels from company to stockist - 4 to 5 deliveries per month
- High service levels from stockist to retailer - at least once a week
- Higher competition among stockists & retailers with availability being a key differentiator

**Tier 2 & Rural**
- Number of stockists per company supplying to retailer - typically 1 or 2
- Relatively lower service levels from company to stockist - 2 to 3 deliveries per month
- Relatively lower service levels from stockist to retailer - as low as once per month
- Partially compensated by higher inventories at stockist

<table>
<thead>
<tr>
<th>Reach</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metros</td>
<td>Tier 2 &amp; Rural</td>
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<td>Decreasing reach and service levels</td>
<td>Partially compensated by higher inventories at stockist</td>
</tr>
<tr>
<td>Higher competition among stockists &amp; retailers with availability being a key differentiator</td>
<td>Lower competition among stockists &amp; retailers</td>
</tr>
</tbody>
</table>

**Increasing potential for sales loss**

Furthermore, lead times to replenish stocks from stockists to retailers also increase, as one moves from metros to rural areas. Higher inventory levels (a stockist in the interior can hold two months’ sale as inventory, which is high when compared to that held by stockists in metros) are maintained to reduce the impact of longer lead times.

**Working capital constraints:** The working capital of the stockist and its cost, determine the amount of credit that can be given to semi-wholesalers and retailers. This constrains the quantity of stock at wholesalers/retailers in terms of the amount of credit and the number of days of credit offered. These credit limitations may manifest in non-uniform availability across semi-wholesalers. The number of retailers where a product is available is directly dependent on the width of semi-wholesalers stocking the product. The impact of these constraints on stocking pattern across semi-wholesalers and retailers increases from Metro to rural areas.

In metros the impact is almost negated by the intense competition among stockists/semi-wholesalers and high service levels. While a stockist, based on capital constraints, can curtail the quantity supplied or the number of semi-wholesalers/retailers supplied to, in accordance with their credit worthiness, they can still end up getting the required volumes as they are serviced by multiple stockists. Even in scenarios where a retailer has to go to a stockist for purchasing the supplies, the retailer has multiple options as most of the stockists operate out of the same market.

On the other end of the spectrum in the rural areas, a retailer is supplied by a select few semi-wholesalers dictated by the semi-wholesaler’s perception of the credit worthiness of the retailer. Hence non-availability at semi-wholesalers can have a more direct impact on non-availability at the retail counter. Typically in these areas a retailer approaches a semi-wholesaler for replenishment with prescription and branded products which are demanded in the catchment of the retailer. Along with these demanded products, the semi-wholesaler pushes fast moving filler products to optimize the cost of logistics incurred in replenishing the retailer. While the demanded products of retailer are typically serviced, the fast moving filler products pushed by the semi-wholesaler end up being a function of availability at the semi-wholesaler. Since large OTX products are fast moving, stockists being confident of collections, may still offer credit to semi-wholesalers which typically results in availability. However, the challenge increases in case of smaller OTX brands which may not get supplied from stockist to semi-wholesaler uniformly, potentially resulting in sales loss.
While availability of stock at a retailer outlet can prevent loss of sale, awareness among customers is another factor that can achieve this for a company, even in the case of non-availability of its products at a retail counter. Due to enhanced awareness, customers are averse to substitution (reinforced by their inherent belief in doctors’ prescriptions), especially in the case of prescription drugs. If products are not available, they may prefer to go to another retail outlet if the option exists. A retailer is typically more aware than the average consumer and would not substitute products, especially in the case of chronic products, and would typically leverage high service levels to service customers with the same product (although delayed) or substitute it (with the doctor’s consent if the need is acute). In metros and tier 1 cities, where service levels are the highest, a retailer can service customers within a few hours and customers are happy to be provided with the products prescribed for them.

Therefore, the possibility of loss of sale is the least in metros due to relatively higher awareness and service levels and the highest (relatively) for OTX products in rural areas, especially for small ones.

**Net margins of retailers:** This is relevant in contexts where retailers go to stockists (in a mandi) to make purchases and in geographies where retailers are price conscious. In the event retailers cannot get the “best price,” they may either postpone their purchase in anticipation of getting a better price or reduce their volume off-take. This behavior, when superimposed on the awareness levels of the retailer and the customer, highlights the fact that the possibility of loss of sale is the least in the chronic ailment segment, followed by the acute prescription and the large OTX segments, and the highest in the smaller OTX segment. Geographically, loss of sale is the least in metros, followed by tier 1 and tier 2 cities and then rural areas.

In summary, it is the small OTX brands which are most susceptible to sales-loss due to non-availability in Tier 2 and rural areas. While issues of reach, service levels and awareness levels contribute to this sales loss, a key role is played by the working capital constraints of the stockists.
2.2 Efficiency – Lack of visibility of post CFA supply chain leading to excess inventories

One of the key operational reasons for excess inventories in the channel is the lack of visibility of pharma companies of stock holding and stock movement in the post CFA supply chain.

<table>
<thead>
<tr>
<th>Lack of visibility of post CFA supply chain and resultant inability to determine actual demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholders</td>
</tr>
<tr>
<td>Stockists</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Semi-wholesalers</td>
</tr>
<tr>
<td>Retailers</td>
</tr>
</tbody>
</table>

Excess inventories are a consequence of poor visibility in the supply chain.

- Sales force targets based on primary sales which may be aggressive - not aligned to actual demand leading to month end sales push
- Sales in the last week:
  - Most companies have 50% to 60% of monthly sales in the last week
  - Some companies even reported 60% to 75% of sales on the last day

In the current state, visibility of the post-CFA supply chain is limited, and is traditionally through the visits of the sales force to stockists/retailers as well as through the monthly stock and sale statements of stockists. As a consequence of this opacity in the chain, pharma companies rely on primary sales to stockists as a metric for measurement of performance. Driven by sales targets on primary sales, the sales force may resort to pushing stocks to distributors at month end, which may result in a month end skew in stockist inventories. In case of variances in demand, primary sales is not aligned to secondary sales and there is an inventory pile-up at stockists.
3. Key implications of findings

Addressing the issues of loss of sales, with a focus on tier 2 and rural markets (particularly in the OTX category), and the month-end inventory skew can lead to significant benefits for pharmaceutical companies by avoiding the following issues:

3.1. Implications of gaps in distribution effectiveness and efficiency:

Faster decline of heritage OTX brands

While the findings of the survey indicate a volume sales loss in the range of up to 5% in OTX brands (up to 20% in small OTX brands), primarily in tier 2 and rural markets, if companies are unable to arrest this loss of sales (compounded over 10 years), it would mean a revenue loss of 30% to 50%. For heritage OTX brands that typically encounter a prescription shift to new molecules, this kind of de-growth will mean faster erosion of brand equity and hasten their decline. Loss of sales could be significantly higher for relatively smaller OTX brands, resulting in them being wiped out from the market.
On the contrary, if companies are able to plug the gap in availability of these categories, it would mean a volume growth of 3%-5% every year, which could almost double the size of a heritage brand over 10 years. The delta between the two cases is 100%-200%, which emphasizes the benefits of ensuring availability.

**Increased pressure of high growth on existing prescription products**

Large pharmaceutical companies typically set targets in correlation with the growth of the pharma market. In the absence of growth of OTX brands, and with new product (molecule) launches ceasing to be a key growth driver after the implementation of the product patent regime, pressure on achieving growth in prescription (Rx) products will be significantly higher.

<table>
<thead>
<tr>
<th>Pharma market growth rates</th>
<th>Contribution to growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
</tr>
<tr>
<td>Overall growth</td>
<td>11.2%</td>
</tr>
<tr>
<td>New products</td>
<td>7%</td>
</tr>
<tr>
<td>Volume growth of existing products</td>
<td>2.8%</td>
</tr>
<tr>
<td>Price growth</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

**Adverse impact on the growth of existing prescription brands due to conflict of resource allocation**

To manage the pressure of high growth, companies could consider two options. They can either neglect heritage OTX brands and invest fully in prescription products, which would indirectly contribute to the faster erosion of heritage brands, or invest the effort of their sales representatives in managing the availability of OTX brands, and thereby detract from their focus on prescription brands. This could lead to a potential conflict of resource allocation leading to sub-optimal performance in both.

**Month end sales skew**

Lack of visibility of stock holding and movements in the post CFA supply chain leads to companies relying on primary sales for setting objectives. If aggressive primary sales targets in prescription and OTX categories do not match the actual demand in the market, it results in month end sales push to stockists.
Trade hygiene issues eventually affecting availability

This situation can be counter-productive and may lead to pile up of inventory, forcing distributors to discount stock and disturb market pricing. This may in turn lead to semi-wholesalers/retailers deferring their purchases in anticipation of the lowest price, which could eventually affect their off-take and further accentuate issues of availability and loss of sales of OTX products.

Motivation issues among field force

The high pressure on month-end targets, when stockists are already carrying excess inventories, may result in representatives feeling a lack of control on sales till the last week of the month, and put a strain on their relationships with stockists. It may even lead to some sales representatives forfeiting their incentives by providing promotional input to stockists and undergoing undue stress. This may result in their being unable to fully focus on their doctor-detailing efforts for prescription products.

Diversion of sales force focus

The sales force which would spend 2-3 days every month on negotiating with stockists and personal order booking at month end. This could detract focus from doctor detailing for prescription products affecting field force productivity.

Challenges in correlating efforts of sales force with actual demand/sales

Lack of visibility of secondary sales leads to companies pooling their sales teams and targets, thereby, masking inefficiencies. Companies are unable to correlate the promotional efforts of their sales force with actual demand/sales.

Higher inventory carrying costs

Lack of visibility of actual demand increases chances of forecast errors leading to higher inventory carrying costs for the company. This situation is further accentuated if stockists burdened with excess inventories refuse to pay on time and in full. Eventually this has an adverse impact on gross margins.
## 4. Way forward

For the issues of distribution effectiveness and efficiency identified in the study, the key levers to address the root causes are –

i. Increase visibility of the channel

ii. Release working capital at the stockist

iii. Ensure generated efficiencies are passed down the channel up to retailers

<table>
<thead>
<tr>
<th>Issues identified in the study</th>
<th>Key levers to address root causes</th>
<th>Desired impact</th>
<th>Potential solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency – Excess inventory in the channel &amp; month-end skewness in sales</td>
<td>Increase visibility of inventories in the post CFA supply chain</td>
<td>Increased connectivity with stockists can provide visibility of stockist inventories</td>
<td>Replenishment model – Automatic replenishment of stocks consumed ex-stockist by tracking secondary sales</td>
</tr>
<tr>
<td>Effectiveness – Sales loss in Tier 2 &amp; rural markets primarily in OTX products</td>
<td>Release working capital at the stockist</td>
<td>Reduction in excess inventories at the stockist can release working capital</td>
<td>Replenishment model</td>
</tr>
<tr>
<td></td>
<td>Ensure generated efficiencies are passed down to retailers</td>
<td>The generated efficiencies can be passed down the channel thereby increasing credit capacity</td>
<td>Trade management team – Separate team for positively engaging stakeholders to ensure propagation of the generated efficiencies down the channel right up to the end stakeholder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This additional credit capacity can be used to increase availability of OTX brands</td>
<td></td>
</tr>
</tbody>
</table>
4.1. Replenishment model for improving efficiencies in the channel

A “Replenishment model” entails increased visibility of secondary sales & ex-stockist supply chain, which can assist in automatically generating orders and supplying based on residual stock levels at distributor. This will assist in optimizing inventories and unblocking capital in the channel without resulting in stock-outs. While the current visibility of most pharma companies is limited to the CFA with a limited/unreliable visibility of stockist, through the replenishment model this can extend from CFA to stockist.

This model also provides a good opportunity to increase efficiency in the distribution channel by removing month-end skew in sales. Further this model can be leveraged to develop a leaner supply chain, going forward. In the long term, the pharma industry could look at optimum, uniform inventories across the channel as the objective.
While implementation of a replenishment model can yield benefits, it is critical to look at the potential points of failure to understand challenges in implementation.

**Critical Success Factors for implementation of replenishment:**

1. **Use of secondary sales as the primary indicator of demand and performance across the organization** - It is important to maintain the continuity of using secondary sales as a reference tool for the following
   - **Sales incentives on secondary sales** - The secondary sales information would have to be given the requisite sanctity and used for performance measurement across levels.
   - **Demand & supply planning based on secondary sales data** - The entire demand and supply planning process could be based on secondary sales to ensure robustness of the process.

2. **Manage short term sales loss on account of moving to a replenishment model:**
   Short term sales loss is key concern of pharma companies contemplating a move towards replenishment. To optimize excess inventories at stockist, a short term drop in sales (approximately one month sale) appears to be inevitable. However, there could be ways to mitigate the effect both through structural changes and the manner in which the implementation is phased.

3. **Manage issues which can lead to potential resistance from stockists:**
   - **Ensure adequacy of IT infrastructure by adopting a phased approach** - To begin with the implementation model can start with ‘A’ class stockists that are comfortable with using technology in their operations and do not have connectivity issues.
   - **Develop a business case highlighting benefits of the replenishment model to counter distributor resistance, particularly if one is a beneficiary of the current system** - In the current system of month end sales push distributors may be getting the benefits of additional discounts which would be negated in the replenishment model. A business case needs to be made by the companies and presented to distributors to make up for this.
4.2. Trade management team for OTX products

For successful implementation of the replenishment model for OTX products, it is imperative to manage the channel, which may require investment in a separate ‘trade management team’. The key role of this team would be to ensure propagation of the generated efficiencies such as unblocked capital, down the channel right up to the end stakeholder i.e. retailer, and to engage these stakeholders to leverage these efficiencies.

A combination of replenishment and trade management with the post CFA supply chain working as partners could yield the above listed benefits for OTX products.

Summary of the benefits of the replenishment model and trade management model

A successful implementation of these initiatives primarily requires a mindset change on the part of pharma companies and a well thought out comprehensive strategy supported by top management belief, will and commitment.
Details of the survey
1. What are the expectations from stockists? Do they vary with geographies? To what extent are these being met?

The key expectations of companies from stockists which may not be fully met include servicing retailers’ demands directly and holding adequate inventory.

<table>
<thead>
<tr>
<th>Role of Stockist</th>
<th>Degree to which they are met</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service demand directly</td>
<td>Low</td>
<td>Stockists may be catering directly to only 1 lakh of the 3 to 4 lakh retailers that the large pharma companies reach. Stockists are keen to cater to only “attractive” set of retailers. The rest are serviced by semi-wholesalers.</td>
</tr>
<tr>
<td>Hold sufficient inventory</td>
<td>Low Medium</td>
<td>Limited visibility - Companies are unable to get visibility of stock levels and sales for 50% to 70% of stockists. Also, companies have no visibility of semi-wholesalers.</td>
</tr>
<tr>
<td>Pass on discounts in full and on time</td>
<td>Low</td>
<td>In ‘Mandi’ markets the challenge is that retailers buy based on price. As a result stockist &amp; sub-stockists focus on discounts. When bonus offers are given by the company, they tend to hoard offers and sell later (when the company offer has expired) to gain a competitive advantage. They may use the discounted product as “arrow-head” to sell other products as well.</td>
</tr>
<tr>
<td>Investment in the company - Allocating fair share of capital</td>
<td>Low Medium</td>
<td>A stockist serves 10 to 15 &amp; in some cases 50 companies. Getting the stockist to allocate fair share of capital is a challenge.</td>
</tr>
</tbody>
</table>

Apart from these expectations, pharma companies also have other specific ones that vary with the stage of a product’s lifecycle. In the case of new products, companies expect distributors to maintain stocks, while the latter prefer to wait for product pull generated by doctors’ prescriptions before stocking these. Furthermore, companies expect support from distributors in monitoring secondary sales, till a definite pattern is established.

The most important role a company wants a stockist to play is to reach out to retailers. However, due to legacy issues (the inertia of stockists), as well as the geographical and financial challenges faced by stockists, many retailers are serviced by sub-stockists, who are not part of the official supply chain and cannot be monitored or controlled by companies. Another key expectation of companies relates to stockists holding adequate inventories, but the limited visibility of the latter’s inventories and secondary sales make the process of monitoring compliance difficult.

In a scenario where the visibility of key channel members is limited, monitoring performance against expectations is a challenge. In this situation, non-availability of products could be a possibility, with companies not being in a position to quantify their extent of sales loss due to this.
2. What influences stockists and retailers to off-take a company’s product?

<table>
<thead>
<tr>
<th>Influencers for stockist to service a product</th>
<th>Priority West</th>
<th>Priority North</th>
<th>Reason for similarity or dissimilarity in influencers across geographies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand for Product</td>
<td>1</td>
<td>1</td>
<td>Across geographies stockists service products which sell in the market to avoid holding slow moving inventory which may tie up working capital till product expiry &amp; return</td>
</tr>
</tbody>
</table>
| Service levels from company (Timely Supply, Quick claims settlement, order fill rate) | 2            | 4             | The difference in priority accorded to service levels from companies highlights the difference in stockist mindsets across regions  
  - In the west, the focus of stockists appears to be on increasing turnaround of stocks, and hence quicker service is valued  
  - In the north, on the other hand discounts seem to prevail. In the ‘mandi’ markets prevalent in the north it is the price and not service that matters to retailers and the same mindset seems to have rubbed off on the stockists of that region  
    Along with the above, another factor that plays on minds of stockists are the achievements of certain targets |
| Margins/Discounts/Offers                    | 4            | 2             | Credit period is typically pre-decided between companies and stockists & did not emerge as a key influencer of off-take. Companies generally give higher credit period when they launch new products |
| Transparency in Operations (Uniformity in trade schemes across stockists) | 5            | 5             | Stockists expect companies to be transparent in offering uniform discounts across the channel to prevent unfair competition. This is a hygiene factor for most stockists |

While the demand for products appears to be the primary driver of product off-take by stockists across regions, in the case of secondary drivers of off-take, opinions differ between India’s western and northern regions. Stockists in the west gave higher priority to service levels in a company over its margins and discounts, while those in the north reversed this priority. The main reason for this dissimilarity in priority could be the difference in the mindset of the trade channels in these regions – in the west, the focus of stockists appears to be on quick turnaround of stocks, while in the north, where traditional mandi markets exist, stakeholders seem to be focused more on price than on service.

The key influencer of a product’s off-take is the demand for it, which implies that if there is demand, market forces tend to ensure availability.
Influencers for retailers to off-take products

<table>
<thead>
<tr>
<th>Influencers for stockist to service a product</th>
<th>Priority ranking</th>
<th>Reason for similarity or dissimilarity in influencers across geographies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand for Product</td>
<td>West: 1, North: 1</td>
<td>Demand for product is the most critical influencer across geographies. Retailers wish to keep those stocks which have a higher demand to avoid holding slow moving inventory which may tie up working capital till product expiry</td>
</tr>
<tr>
<td>Discounts/Offer</td>
<td>West: 2, North: 2</td>
<td></td>
</tr>
<tr>
<td>Credit Limit</td>
<td>West: 4, North: 3</td>
<td>In regions where the retailer goes to the stockist for replenishment, service levels from stockists are less important and longer credit periods take precedence. Where stockists serve retailers, the service levels of the stockist gain importance for off-take</td>
</tr>
<tr>
<td>Service levels from stockists (Timely Supply, Quick claims settlement)</td>
<td>West: 3, North: 4</td>
<td></td>
</tr>
</tbody>
</table>

The key influencer for retailers to off-take products is the demand for these. All other factors are secondary to demand. This highlights the fact that the pharma supply chain is customer-centered and responds to the demand for a product – if there is a demand, market forces tend to ensure availability.

<table>
<thead>
<tr>
<th>Influencers of retailer’s purchase</th>
<th>Priority ranking</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor (prescriptions)</td>
<td>1</td>
<td>Doctor’s prescription and the consumer’s demand are most critical for retailer to off-take products. This reinforces the point made in the previous section that products for which demand exists would be available in the channel</td>
</tr>
<tr>
<td>Consumer/patient</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Distributor/salesmen of distributor</td>
<td>3</td>
<td>For non-prescription (OTX) products the distributor’s salesman can play a role by providing information on products with margins/discounts. Even for Rx, the distributor’s salesmen can curtail quantities based on retailer’s credit</td>
</tr>
<tr>
<td>Company’s sales representative</td>
<td>4</td>
<td>Makes retailer aware of prescription generation efforts in a region and can influence retailer’s purchase</td>
</tr>
</tbody>
</table>

Key entities influencing retailer off-take include doctors and consumers, which further reinforces the criticality of the demand for a product.
3. How does replenishment of stocks at retailer happen?

Replenishment of products for retailers can take place through stockists, semi-wholesalers or the mandi (market), each of which present potential challenges.

A chemist typically records in a “short” book, the products for which prescriptions “bounce” or those whose stocks are below a certain level. This forms the basis of a retailer’s order. Retailers can use any of the following of modes to replenish stocks:

- **Replenishment through stockists**: Retailers can place orders either through salesmen of stockists who periodically visit the former or even over the phone. This is more prevalent in metros. In the event a retailer’s credit limit has been exceeded, the stockist can either curtail the quantities supplied (in the north) or take fewer orders from the retailer (in the west).

- **Replenishment through semi-wholesalers**: The retailer can also place orders with semi-wholesalers (over the phone or to the semi-wholesaler’s salesman). This is more prevalent in Tier 1 and rural markets. A key challenge in replenishment through semi-wholesalers is that semi-wholesalers tend to stock only fast-moving products, which leads to potential non-availability of slow-moving ones.

- **Replenishment by retailer’s visit to mandis**: In states such as UP, Bihar, West Bengal and Chattisgarh, the traditional mandi is still functional. Retailers can visit these for replenishment and have the option to make a choice between multiple stockists and semi-wholesalers. The primary driver of off-take in such markets is the price.
4. Is there a sales loss due to non-availability of products at point of sale (retail counter)? Does non-availability vary across metros & tier 1?

Loss of sales due to non-availability is negligible in metros, but its intensity increases in Tier 1 markets.

Most stakeholders in the supply chain acknowledge that loss of sales loss may occur due to non-availability of products at retail counters. More than 75% of company respondents (71% in distribution, 80% in sales and marketing) and 60% of channel respondents (78% in Tier 1 markets and 43% in metros) acknowledged loss of sales. However, most indicated that the quantum of loss was negligible in metros and up to 5% in Tier 1 markets. The findings on sales loss in Tier 2 and rural markets have been addressed separately.

![Diagram showing the extent of sales loss in metros and Tier 1](image)

Acknowledgement of loss of sales by channel respondents varied with the geography in which a player operates. Respondents in metros were less inclined to acknowledge loss of sales. Only 25% of retailers interviewed in metros acknowledged loss of sale.

- Stock-outs at the stockist level are rare in metros for the following reasons:
  - Markets in metros are extremely competitive with multiple stockists, and the differentiator is availability. Stockists hold the inventories of most SKUs.
  - If stockists hold inventories and there is a demand (from doctors or consumers), retailers also tend to hold stock.
  - Even if there is a stock-out at a stockist, there are multiple stockists that are willing to serve a chemist from which the chemist can obtain stock. Stockists can supply stocks within a day or half a day, making replenishment easier.
Even if the retailer cannot arrange stocks at short notice, there are generally multiple retailers in the vicinity that can cater to customers’ or retailers’ requirements.

Patients or customers in these areas have high awareness. They do not allow chemists to substitute products. If these are not available at one store, their preference is to try getting it from other chemists.

While loss of sales was acknowledged by the majority of stakeholders (78% of distributors and retailers) in Tier 1 markets, the percentage did not appear to be more than 5%.

Stockists in tier 1 markets hold more inventory to prevent stock-outs (30 to 40 days as compared to 20 to 25 days in metros). They are also given a longer credit period by companies as compared to urban stockists, which makes it easier for them to hold higher inventories.

Inventories in the channel being aligned to demand due to the customer-centricity of channel members:

Retailers tend to hold the stocks of a product for which there is demand because of doctors in the catchment area prescribing the drug.

Even stockists are driven by customer-centricity and stock products that are in demand. For example, a stockist of company A in a Tier 1 market reported that when he realizes that there is a demand for company B’s products, he even acts as a semi-wholesaler for company B to make stocks available to retailers.

Based on the responses of pharma companies, it seems that the extent of non-availability and loss of sales is likely to be higher in rural markets.
5. What is the behavior of retailer in case of non-availability? Does this vary by product categories?

Loss of sale due to non-availability seems to be relatively higher in OTX products as compared to acute chronic ones.

<table>
<thead>
<tr>
<th>Options exercised</th>
<th>Chronic – prescription/non-prescription</th>
<th>Acute – prescription</th>
<th>OTX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asking the customer to wait and replenish product at the earliest</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Asking the customer to buy a product from another store</td>
<td>Medium</td>
<td>Medium to Low</td>
<td>Medium to Low</td>
</tr>
<tr>
<td>Substitution with another product</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Variation across geography</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Across regions and product categories, the primary tendency of the retailer is to ask a customer to wait and replenish a product in time. The tendency to substitute is relatively low in the case of chronic or acute (prescription) drugs, although it is for varying reasons, as indicated below.

**Chronic – prescription/non-prescription**

► **Risk aversion**: In the case of non-availability of chronic products—be they prescription or non-prescription, the retailer does not intend to substitute, because of the potential adverse reaction. Existing users of such products are also averse to change. This is common across all the markets. Therefore, in such cases, substitution is minimal, since one of the following two can occur:

► The patient is served in time although not immediately.

► The patient is requested to visit another chemist.

In either of the cases given above, a retailer may lose sales, but the company may not lose sales since the product is in most cases brought from another chemist.

► **Planned purchase**: Purchases in this category are planned, and patients are willing to wait on most occasions. This enables retailers to service them later or patients go to another retailer.

Products may be substituted in rare cases when there is their continued unavailability (generally due to issues at the CF&A or company level). Even in such cases, chemists or patients take the prior consent of doctors.

**Acute – prescription**

► **Competition among stockists**: A chemist is serviced by multiple stockists in urban areas and can arrange for replenishment in less than a day due to increasing competition amongst stockists. Typically, a large number of customers agree to this due to an increasing number of retailers providing home delivery services.

► **Competition among retailers**: The high density of retail chemists is leading to retailers servicing complete prescriptions in order to retain customers. They either leverage the higher service levels of stockists or purchase products from a nearby chemist and service their customers. The latter option is followed in the event a customer exhibits urgency.

► **Relationship with doctors**: Retailers do not disrespect doctors’ prescriptions. Even if they substitute products, it is with the consent of the doctors.

► **Awareness**: Customers are averse to substitution due to their levels of awareness and inherent trust in their doctors.
While the number of distributors per company is low in tier 1 markets, as compared to metros, the attitude of retailers in these is similar to that of urban retailers. In the event of urgency, the consent of doctors is taken before products are substituted by retailers. Furthermore, significant increase in awareness has been reported in the last four to five years,* even in rural markets.

**OTX drugs**

- In the case of OTX drugs in urban markets, competition amongst stockists leads to high frequency of servicing for chemists, and therefore, they can arrange for replenishment in less than a day.

- In the event customers exhibit urgency or are not living in the vicinity, they are requested to visit another chemist. In these situations as well, chemists are not willing to substitute products because patients do not want to substitute products due to their increasing awareness.

- However, in tier 1 markets, chemists cannot service demands quickly due to the lower frequency of stockists servicing their requests. They then may try to give substitute (alternate products) if the consumer is seeking immediate medication for relief and is not willing to wait and the need is for acute disease. However this may not necessarily be a wide phenomenon.

* Even people who cannot read and write can recognize a product due to their previous experience (through its look and feel).
6. What, according to you is the point of failure?

The root causes of non-availability in Tier 1 markets can be summarized as below.

While the point of failure can be the retailer, the distributor or the company CFA, the most frequent is the retailer. Loss of sales loss due to non-availability of products can occur for the following reasons:

1) Stock-out at retailer

   a. Issues in distributor reach:

   ▶ **Fewer distributors in Tier 1 markets**: While retailers in metros can have access to up to 50 distributors, in tier 1 towns, this number is much lower. Therefore, replenishment of SKUs for which there is a demand may not be possible at the retailer level in Tier 1 markets.

   ▶ **Lower frequency of supply**: While this is not an issue in metros, there are many upcountry markets, where the frequency of semi-wholesaler or distributor supply is once a month.

   ▶ **Lower resilience to interruptions in supply**: In the interiors, in many cases it is the retailer, who approaches the distributor for replenishment of stocks. The supply chain in these markets is informal and even variations in weather and geographical challenges may interrupt supply to retailers, leading to stock-outs
b. Insufficient stocks at retailer:

- **Curtailment of orders due to limitations in retailer credit:** The credit limit of retailers is decided by distributors and there may be cases when the distributor curtails the quantity supplied to a retailer, which increases the probability of stock-out. Retailers record stock-outs in short-books, which form the basis of orders to distributors or salesmen of the distributors. However, the products received against the order are often not recorded by the retailers. If a particular SKU is not supplied or supplied a quantity that is less than what was ordered, retailers are only aware of this when they retrieve the SKU against a prescription, which leads to incidences of non-availability.

- **Lower stocks held in categories where retailer has higher control:** This occurs more in the case of OTX and mass market products. In the case of prescription-driven products, retailers may not be in a position to estimate demand and therefore buy consistently and in higher quantity to avoid stock-outs. However, in the case of OTX, customers may not insist for the same product in case of non-availability. They may not therefore stock such products adequately.

- **Deferment of orders till schemes/discounts are available:** Price-sensitive retailers may wait for schemes/discounts on products before placing orders. This may lead to non-availability of products.

2) Stock-out at distributor

- **Lower frequency of service to distributors:** Upcountry distributors are typically supplied once or twice a month, which requires them to stock large quantities due to the possibility of losing sales.

- **Longer lead times for supply:** Coupled with lower frequency, lead times for supplying to upcountry distributors are higher than in the case of those in other markets, which results in their facing challenges in servicing urgent orders.

3) Stock-out at CFA

- Although such incidences are rare, there can be stock-outs at company CFAs due to various reasons including interruption in supply of raw material, issues with third-party manufacturers or even demand-forecasting errors.
7. Does the availability of stock at retailer influence the demand pattern? If so which categories lend themselves to such influence?

Most respondents agreed that persistent non-availability of products in the channel leads to an adverse affect on demand as the doctors stop prescribing products where availability is an issue. While the incidence of non-availability is less in chronic products, the impact of non-availability on demand is more severe in the case of chronic products, followed by prescription-based drugs for acute ailments and the lowest in popularity are OTX brands.

<table>
<thead>
<tr>
<th>Product category (based on demand generation process)</th>
<th>Relative incidence of non-availability</th>
<th>Relative impact of non-availability on demand</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic</td>
<td><img src="Gray" alt="Low" /></td>
<td><img src="Yellow" alt="High" /></td>
<td>While both in chronic and acute segments, non-availability can influence doctor’s prescription writing behavior, bouncing of prescriptions is less desirable in case of drugs for chronic care, because doctors tend to be more careful about availability for chronic drugs</td>
</tr>
<tr>
<td>Acute - prescription</td>
<td><img src="Gray" alt="Low" /></td>
<td><img src="Yellow" alt="High" /></td>
<td></td>
</tr>
<tr>
<td>OTX</td>
<td><img src="Gray" alt="Low" /></td>
<td><img src="Yellow" alt="High" /></td>
<td>For OTX categories of products, the impact on demand depends on the popularity of the drug. For a legacy brand/popular drug the customer will insist on buying from another chemist. Even if the sale is lost (substituted), he may try again the next time for the popular drug. However persistent non-availability may eventually affect demand</td>
</tr>
</tbody>
</table>

Persistent non-availability of products can have an adverse affect on their demand, since the doctors may stop prescribing in cases where availability is an issue.
8. In cases where availability is not an issue, are there other challenges related to efficiency?

In the current state, visibility of the post-CFA supply chain is limited, and is traditionally through the visits of the sales force to stockists/retailers as well as through the monthly stock and sale statements of stockists. As a consequence of this opacity in the chain, pharma companies rely on primary sales to stockists as a metric for measurement of performance. Driven by sales targets on primary sales, the sales force may resort to pushing stocks to distributors at month end, which may result in a month end skew in stockist inventories.

Skewed sale is a common phenomenon in the pharma industry. Most industry estimates indicate that 55% to 60% of sales take place in the last week of the month. This may be as high as 60% to 75% of sales on the last day of the month in extreme cases.

**Root causes of month-end inventory pile-up at stockists**

- Lack of visibility of secondary sales
- Sales force targets aligned to primary sales leading to push from company’s sales reps
- Distributor prefers month end as weekly deliveries would necessitate physical and book reconciliation more frequently
- Distributor’s working capital management has become aligned to the month end cycle
- Distributors also wait for month end in the expectation of higher discounts from companies/ MRs
- Distributors, particularly in the interiors, feel stocking up at month end may reduce sales loss

**Lack of visibility leading to issues of month end skew in sales**
9. How does the sales loss due to non-availability in tier 2 and rural markets compare with that in metros and tier 1?

Extent of loss of sales high in tier 2 and rural markets

While non-availability was found to be negligible in metros, in tier 2 and rural markets it was much higher.

<table>
<thead>
<tr>
<th>Effectiveness (Sales loss^*)</th>
<th>Metro</th>
<th>Tier 1</th>
<th>Tier 2 and beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0-1%</td>
<td>Limited 1-3%</td>
<td>High Upto 5% (Upto 20% in small OTX* brands)</td>
</tr>
</tbody>
</table>

Source: Primary interviews

^Sales loss by volume

*OTX are mature, late lifecycle, acute therapy brands which are prescription based but have bulk of non-prescription sales. Small OTX brands can be defined as a sub-set of OTX brands which are relatively smaller in size and reach (<INR 15-20crore brand size). There is typically a geographical skew in small OTX brands, with reach & performance being relatively better in certain geographies compared to others.

Reasons for higher sales loss in Tier 2 and rural areas

The reach of the pharma supply chain in tier 2 and rural areas is limited as compared to metros and tier 1 markets with fewer stockists/semi-wholesalers reaching a retailer and lower frequency of service as compared to metros.

Another key aspect which influences non-availability in tier 2 and rural markets is the working capital constraints of a stockist. The working capital of the stockist and its cost, determine the amount of credit that can be given to semi-wholesalers and retailers. This constrains the quantity of stock at wholesalers/retailers in terms of the amount of credit and the number of days of credit offered. These credit limitations may manifest in non-uniform availability across semi-wholesalers. The number of retailers where a product is available is directly dependent on the width of semi-wholesalers stocking the product. In the rural areas, a retailer is supplied by a select few semi-wholesalers dictated by the semi-wholesaler’s perception of the credit worthiness of the retailer. Hence non-availability at semi-wholesalers can have a more direct impact on non-availability at the retail counter.

Typically in these areas a retailer approaches a semi-wholesaler for replenishment with prescription and branded products which are demanded in the catchment of the retailer. Along with these demanded products, the semi-wholesaler provides fast moving filler products to optimize the cost of logistics incurred in replenishing the retailer. While the demanded products of retailer are typically serviced, the fast moving filler products pushed by the semi-wholesaler end up being a function of availability at the semi-wholesaler. Since large OTX products are fast moving, stockists being confident of collections, may still offer credit to semi-wholesalers which typically results in availability. However, the challenge increases in case of smaller OTX brands which may not get supplied from stockist to semi-wholesaler uniformly, potentially resulting in sales loss.
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Engage, Enable, Energize

Dynamics of supply chain transactions for Tier 2 & rural markets

The stockist serves the demand of the semi-wholesaler and retailers
The working capital of the stockist and its cost, determine the amount of credit that can be given to semi-wholesalers and retailers
This constrains the quantity of stock at wholesalers/retailers in terms of the amount of credit and the number of days of credit offered
While retailer demanded products typically get serviced, the challenge is more to do with OTX categories
Since large OTX products are fast moving, stockists being confident of collections, may still offer credit to semi-wholesalers which typically results in availability
In case of small OTX, the challenge increases as stockists might not supply these to sub-stockists on credit

Semi-wholesaler
Semi-wholesaler get products from the stockists and serve retailer's demand
They serve the dual purpose of stocking SKUs of multiple companies and financing the retailer through credit
The credit limitations at stockists may manifest in non-uniform availability of products across semi-wholesalers
To optimize logistics cost of delivery, along-with the retailer demanded products, semi-wholesaler also provides fast moving filler products (OTX brands). These fast moving filler products are a function of availability at the semi-wholesaler (which itself is a function of supply by stockists)

Retailer
The number of retailers where a product is available is directly dependent on the width of semi-wholesalers stocking the product.
The number of semi-wholesalers a retailer deals with is limited in rural areas.
While the retailer demanded products are more often than not supplied by the stockist, fast moving filler brands are typically a function of availability
If products such as small OTX are not available at the limited number of semi-wholesalers supplying to a retailer in rural areas, it results in non-availability at retailer

In summary, in the case of OTX categories in tier 2 and rural markets, it is critical to ensure availability of credit to semi-wholesalers and increase efficiency across stakeholders while offering incentives to the channel.

Availability of credit across the supply chain
Financing of retailers and semi-wholesalers through credit forms a critical aspect of the rural supply chain.
Provision of credit to each stakeholder could be a critical aspect, so that the additional credit can be invested in OTX filler brands across the channel

Increase efficiencies across stakeholders in the supply chain
Stakeholders should optimize their inventory in such a way that they can release capital and leverage it to invest in OTX filler brands

Availability of credit to each stakeholder across the supply chain
Financing of retailers and semi-wholesalers through credit forms a critical aspect of the rural supply chain.
Provision of credit to each stakeholder could be a critical aspect, so that the additional credit can be invested in OTX filler brands across the channel

Key requisites for ensuring availability
Availability of credit across the supply chain and of SKUs/stock can prevent loss of sale or lead to increase in sale. As products for chronic ailments typically reach customers (or vice versa), the availability of credit can be leveraged, primarily in the case of OTX categories. However, a significant consideration is not only that there is a demand for such products, but also that the prescriber and dispenser has confidence in the brands.
Annexure 1
Sample for the survey

Respondents from Companies

Respondents from companies include leaders of Sales & Marketing and Distribution arm of the company.

<table>
<thead>
<tr>
<th>Department</th>
<th>No of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales &amp; Marketing</td>
<td>5</td>
</tr>
<tr>
<td>Distribution</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
</tr>
</tbody>
</table>

Respondents from the Channel

Respondents from the channel include stockists, semi wholesalers and retailers from different geographies that include Mumbai, Delhi, Raipur, Ghaziabad, Meerut, uptown Nagpur, Agra, Islampur, Rajgarh and Ratnagiri.

<table>
<thead>
<tr>
<th>Distributor</th>
<th>Semi Wholesaler</th>
<th>Retailer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delhi</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Mumbai</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Raipur</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Islampur</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Rajgarh</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Meenut</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Ghaziabad</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Modinagar</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Agra</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Ratnagiri</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Uptown Nagpur</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other rural districts</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>6</td>
<td>24</td>
</tr>
</tbody>
</table>
Acknowledgements

We also acknowledge the invaluable contribution of the stockists, semi-wholesalers and retailers of Agra, Delhi, Ghaziabad, Islampur, Meerut, Modinagar, Mumbai, Nagpur, Raipur, Rajgarh and Ratnagiri who participated in our survey.
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ED None